



Color Rear Video Projector

Operating Instructions for 3 models

Before operating the projection TV, please read this manual thoroughly and keep it for future reference.

KP-46XBR25


KP-53XBR25

KP-61XBR28


Precautions

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION:

TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

Note to CATV system installer in the USA

This reminder is provided to call the CATV system installer's attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

Use of this projection TV for other than private viewing of programs broadcast on UHF or VHF or transmitted by cable companies for the use of the general public may require authorization from the broadcaster/cable company and/or program owner.

This projection TV receiver provides display of television closed captioning in accordance with § 15.119 of the FCC rules.

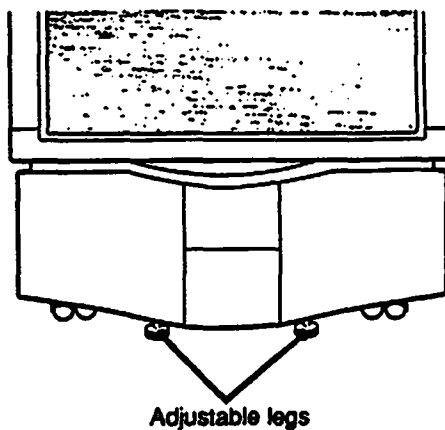
Safety

- Operate the projection TV only on 120 V AC.
- One blade of the plug is wider than the other for safety purposes and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.
- If you spill or drop anything liquid or solid into the cabinet, unplug the projection TV and have it checked by qualified personnel before operating it any further.
- Do not place anything containing liquids (vases, coffee cups, etc.) on the optional VCR tray. Spilled liquid may enter and damage the projection TV.
- Unplug the projection TV from the wall outlet if you are not going to use it for several days or more. To disconnect the cord, pull it out by the plug. Never pull the cord itself.

If you have any questions or problems concerning the projection TV, contact your nearest Sony dealer.

Stabilizing the projection TV (except for KP-61XBR28)

The projection TV should be installed so that it is as level as possible, for safety purposes. After setting up, always lower the two adjustable legs located at the bottom, by turning the legs to the left, to stabilize the projection TV.



Owner's Record

The model and serial numbers are located at the rear of the TV. Record these numbers in the spaces provided below. Refer to them whenever you call your Sony dealer regarding this product.

Model No. _____

Serial No. _____

Contents

Preface

Precautions	2
Welcome	4
Features	4
Important Information	5

Chapter 1: Setting Up

Unpacking and Viewing Area	6
Locating Controls and Connectors	7
Making Antenna Connections	13
Connecting Other Equipment	15
Connecting a VCR, video disc player or Camcorder equipped with an S video output jack	15
Connecting a VCR, video disc player or Camcorder not equipped with an S video output jack	16
Connecting two VCRs (equipped with an S video output jack) for tape editing	17
Connecting two VCRs (not equipped with an S video output jack) for tape editing	18
Connecting a stereo audio system	19
Using the TV speakers as center speakers	20
Connecting external speakers (not supplied) as rear speakers	21
Using the On-Screen Menus	22
Navigating through the menus	24
Changing the menu language	24
Adjusting Color Registration (CONVERGENCE)	26
Setting CABLE ON or OFF	28
Presetting TV Channels	30

Chapter 2: Using Basic Features

Watching TV Programs	36
Using Closed Caption	38
Using Convenient Features	40
Muting the sound – MUTING	40
Keeping the displays on-screen – DISPLAY	40
Setting the sleep timer – SLEEP	40
Switching quickly between two channels – JUMP	41
Previewing the features – DEMO	41
Storing an image in memory – DIGITAL MEMO	42
Selecting a Picture and Sound Mode	43

Chapter 3: Using Advanced Features

Watching Two Pictures at Once (PIP)	45
Adjusting the Picture	50
Adjusting the Sound	55
Customizing the Screen Display	61
Setting channel captions – CH CAPTION	61
Setting VIDEO LABEL	63
Using Timer-Activated Functions	64
Setting DAYLIGHT SAVING	64
Setting the clock — CURRENT TIME SET	65
Setting the ON/OFF TIMER	67
Setting CHANNEL BLOCK	70
Setting FAVORITE CHANNEL	72
Using the Programmable Remote Commander	74
Operating non-Sony or Sony audio and video equipment (Learning function)	79
Selecting a VCR mode directly — DIRECT PLAY	80

Appendix

Troubleshooting	82
Specifications	83
Index	84

Welcome

Welcome to the Sony XBR series. By following the instructions in this manual, you will be able to enjoy the advanced technology which brings you useful features and high quality viewing.

About the manual

This manual covers three models, KP-46XBR25, KP-53XBR25 and KP-61XBR28. The illustrations are based on model KP-61XBR28, but the only difference among the three is size. All of the displays and functions are the same for all models.

We highly recommend that you read this manual before using your projection TV, to set up and make connections safely and to make maximum use of the many functions. Then keep the manual handy for future reference.

Features

Sony's unique features

- The multi-band VHF/UHF/CATV tuner lets you receive up to 125 cable channels, for a total of 181 possible off-air and cable channels.
- The built-in Multichannel TV Sound (MTS) decoder lets you receive stereo programs and Second Audio Program (SAP) broadcasts.
- You can receive superior VCR playback by connecting a VCR with an S video output jack to the S VIDEO IN jacks.
- You can receive hi-fi sound by connecting an audio system to the audio output jacks.
- View the closed caption and the text by using Closed Caption.

XBR series special features

- Automatically preset all receivable channels with AUTO PROGRAM.
- Switch quickly between two channels, using JUMP.
- Watch another TV channel, video or cable image as a window picture, using Picture-in-Picture.
- Operate the projection TV, plus Sony and most other manufacturers' video equipment, a cable converter box and a Sony multi disc player with the supplied Remote Commander, using the Pre-Programmed feature.
- Program the supplied Remote Commander to operate the equipment of manufacturers whose code is not pre-programmed, using the Learning feature.
- Call up on-screen menus to set time-related functions (ON/OFF TIMER, CHANNEL BLOCK, DAYLIGHT SAVING), to customize the screen (CH CAPTION, VIDEO LABEL) and to adjust the picture and sound.
- Set optional video equipment on the projection TV, by mounting the optional VCR Tray (see the separate VCR Tray installation instructions).

XBR series advanced technology

- The DSP (Digital Sound Processor) Axis™ Sound System gives you a choice of sound modes, to create user-controlled environments.
- Dynamic Picture™ system adjusts picture contrast automatically to produce more detail in both bright and dark areas of the picture.
- Velocity Modulation (VM) circuitry produces clean and sharp black and white contrasts.
- Dynamic Focus™ circuitry automatically focuses the scanning electron beam for enhanced sharpness over the entire picture, especially at the corners.
- Trinitone™ control allows you to adjust the picture's color temperature (tint) for the best possible color.

Important Information

Please read the following information on using and maintaining the projection TV, for optimum viewing quality.

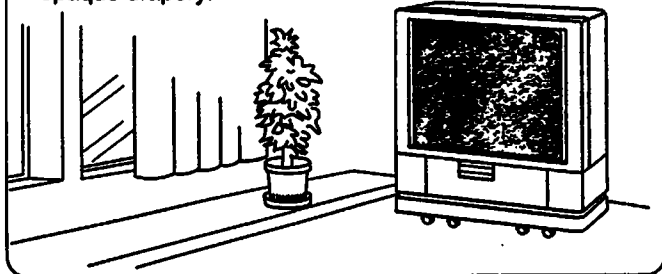
Picture quality

- Poor color registration (the red, green and blue signals do not overlap properly) may be caused by the influence of the earth's magnetism. Correct this with the CONVERGENCE adjustment (pp. 26 – 27).
- Avoid touching the screen, and take care not to scratch the surface with hard objects.
- Leaving a fixed pattern on the screen for long periods of time, when operating a video game or personal computer, may damage the picture tube. To avoid this, keep the picture contrast and the brightness levels low (PICTURE and BRIGHT adjustment, pp. 50 – 51).

Illumination

To obtain a clear picture, do not expose the screen to direct illumination or direct sunlight. If possible, use spot lighting directed down from the ceiling.

Cover the windows that face the screen with opaque drapery.



The floor and walls should not be of a light-reflecting material. If necessary, cover them with dark carpeting or wallpaper.

Installation

- To prevent internal heat built-up, do not block the ventilation openings.
- Do not install the projection TV in a hot or humid place, or in a place subject to direct sunlight, excessive dust or mechanical vibration.
- Avoid operating the projection TV at temperatures below 5°C (41°F).
- After transporting the projection TV directly from a cold to a warm location, or if the room temperature has changed suddenly, pictures may be blurred or show poor color over portions of the picture. This is because moisture has condensed on the mirrors or lenses inside the projection TV. Let the moisture evaporate before using the projection TV.
- Avoid placing the projection TV on a slanted or uneven floor. After setting up, adjust the levelling legs to stabilize the projection TV (p. 2).

Maintenance

- Save the original shipping carton and packing material to use if you ever have to ship your projection TV. For maximum protection, repack your projection TV as it was originally packed at the factory.
- To keep the cabinet looking brand-new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth slightly dampened with a mild detergent solution. Never use strong solvents such as thinner or benzine, or abrasive cleansers since these will damage the cabinet. As a safety precaution, unplug the projection TV before cleaning it.
- To remove dust from the front of the screen, unplug the projection TV and wipe it gently with a soft cloth slightly dampened with water or a mild detergent solution, using vertical strokes only. Then wipe it again with a dry, soft cloth. Never use solvents or thinners for cleaning purposes.
- If the picture turns dark after the projection TV has been in use for a long period of time, it may be necessary to clean the inside of the projection TV. Consult qualified service personnel for this.

Chapter 1: Setting Up

Unpacking and Viewing Area

- 1 Carefully follow the instructions on the outside of the packing carton to unpack the projection TV.

Notes

- The supplied accessories are packed in the bottom of the carton. Be sure not to throw them away.
- Keep the original carton and packing materials to safely transport the projection TV in the future.

- 2 Check to make sure that the following is included:

Universal Remote Commander RM-Y114A (1)
with 2 size AA (R6) batteries

If the Remote Commander is missing, contact your dealer.

- 3 Place the projection TV in a cool, dry place where the ventilation openings at the sides are not blocked.

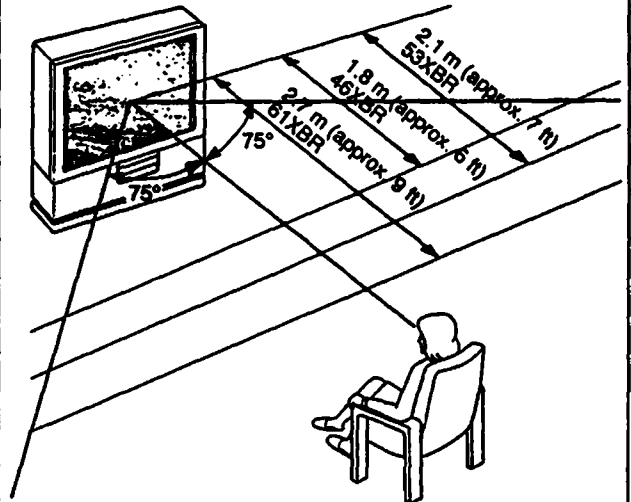
- 4 Plug the projection TV power cord into an AC 120 volt power outlet.

For further precautions, see p. 2.

Optimum viewing area

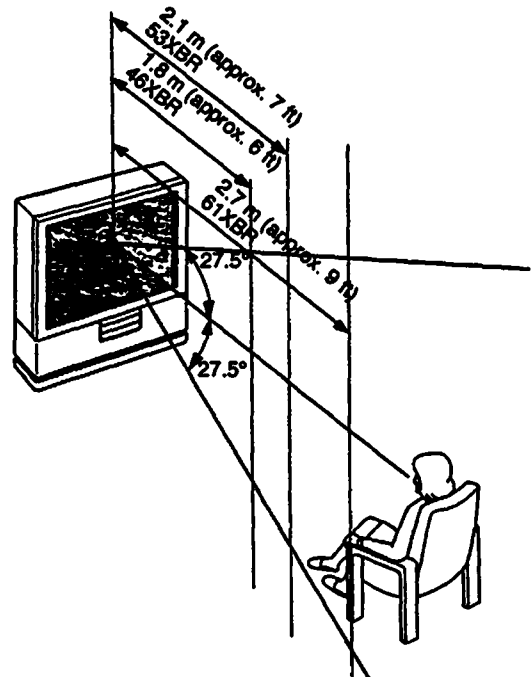
For the best picture quality, try to position the projection TV so that you can view the screen from within the areas shown below.

Horizontal viewing area



Optimum viewing position

Vertical viewing area

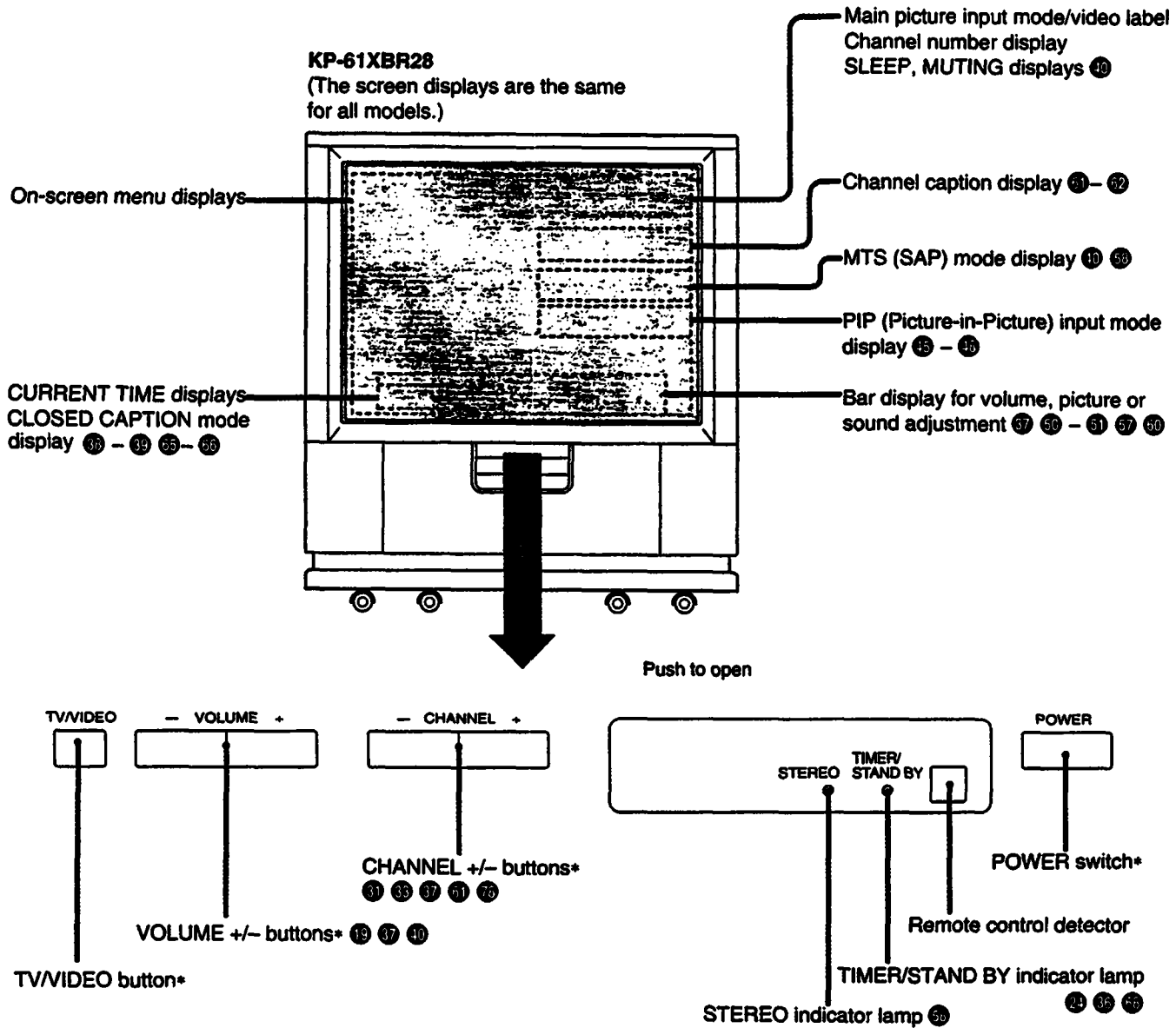


Optimum viewing position

Locating Controls and Connectors

For details, see the pages indicated by the numbered black circles ●.

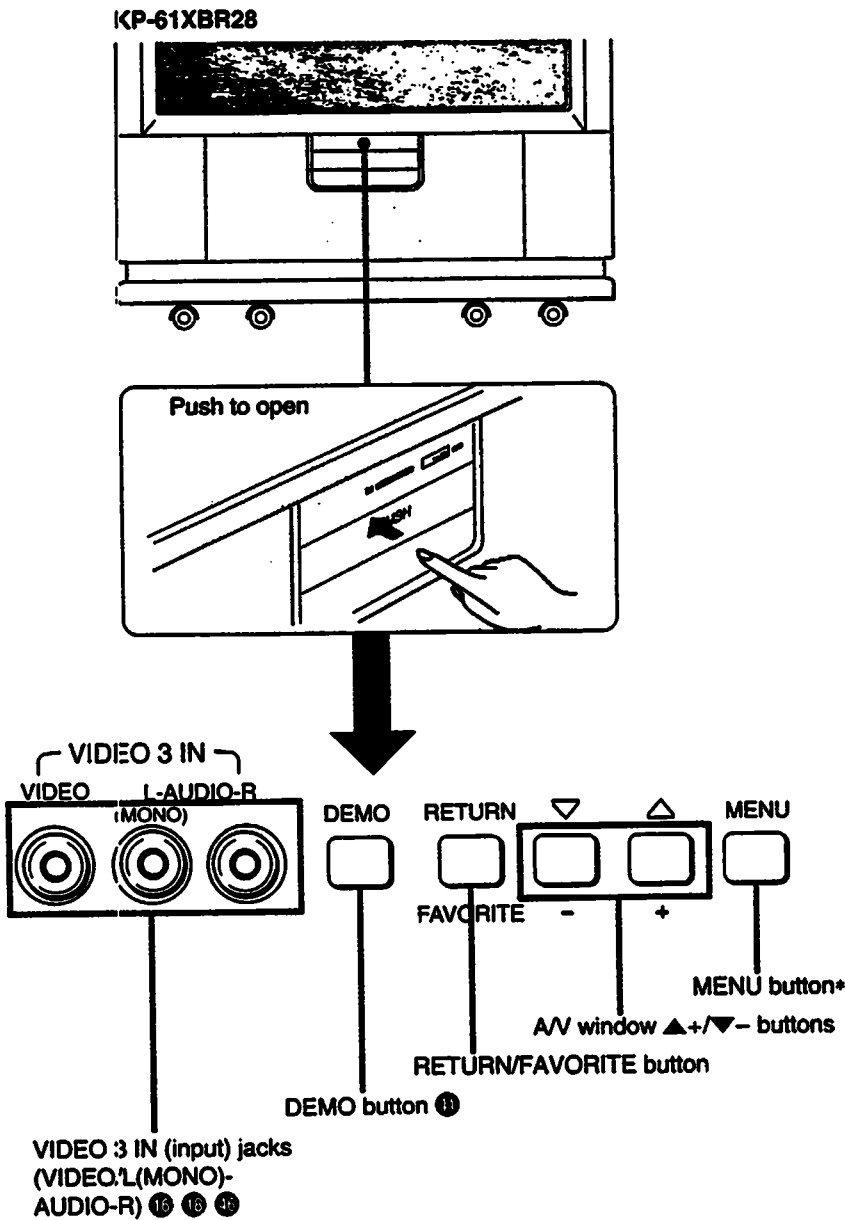
Front



Unpacking and Viewing Area
Locating Controls and Connectors

* Buttons with the same function are also located on the Remote Commander (p. 10).

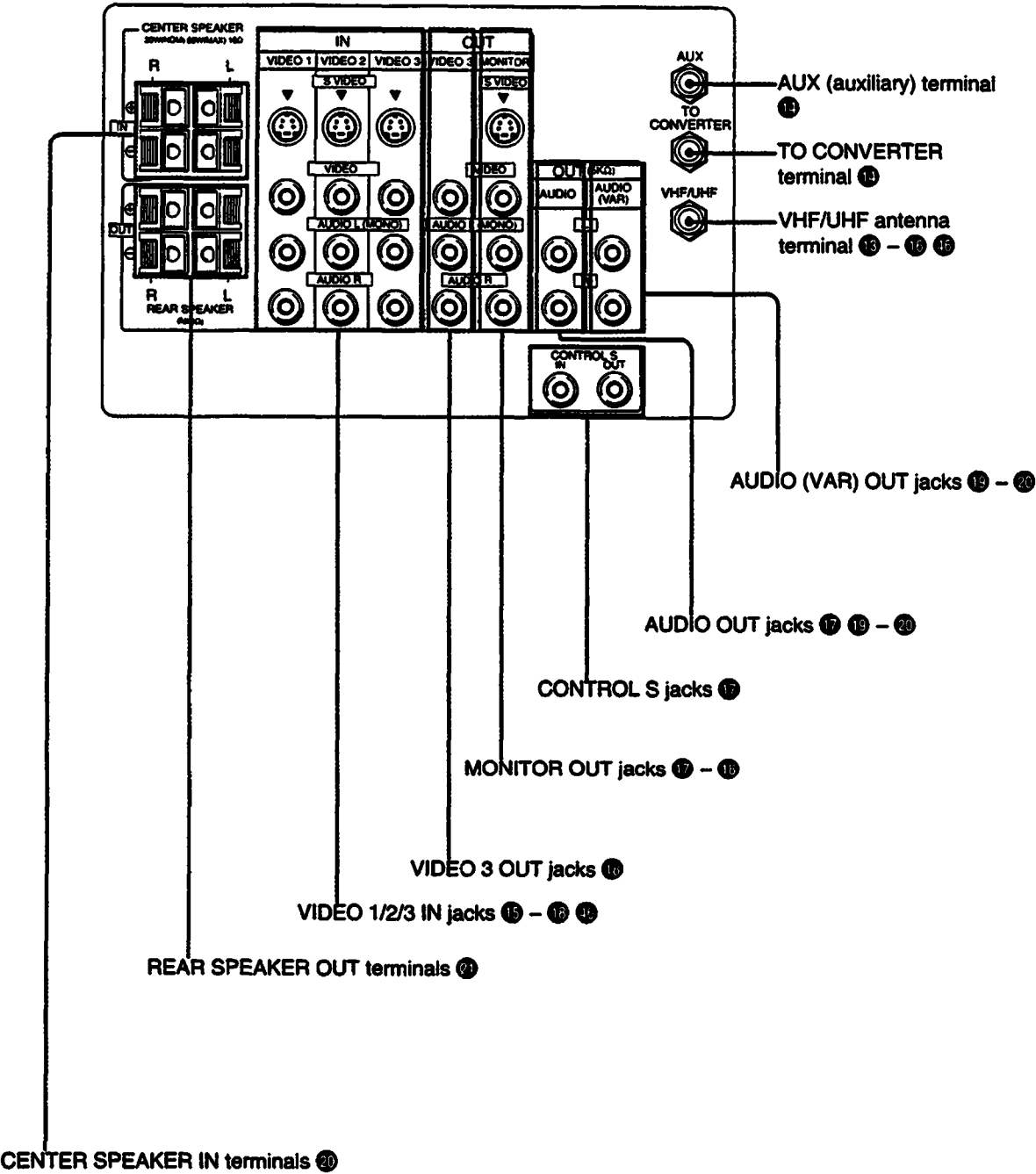
Front inner panel



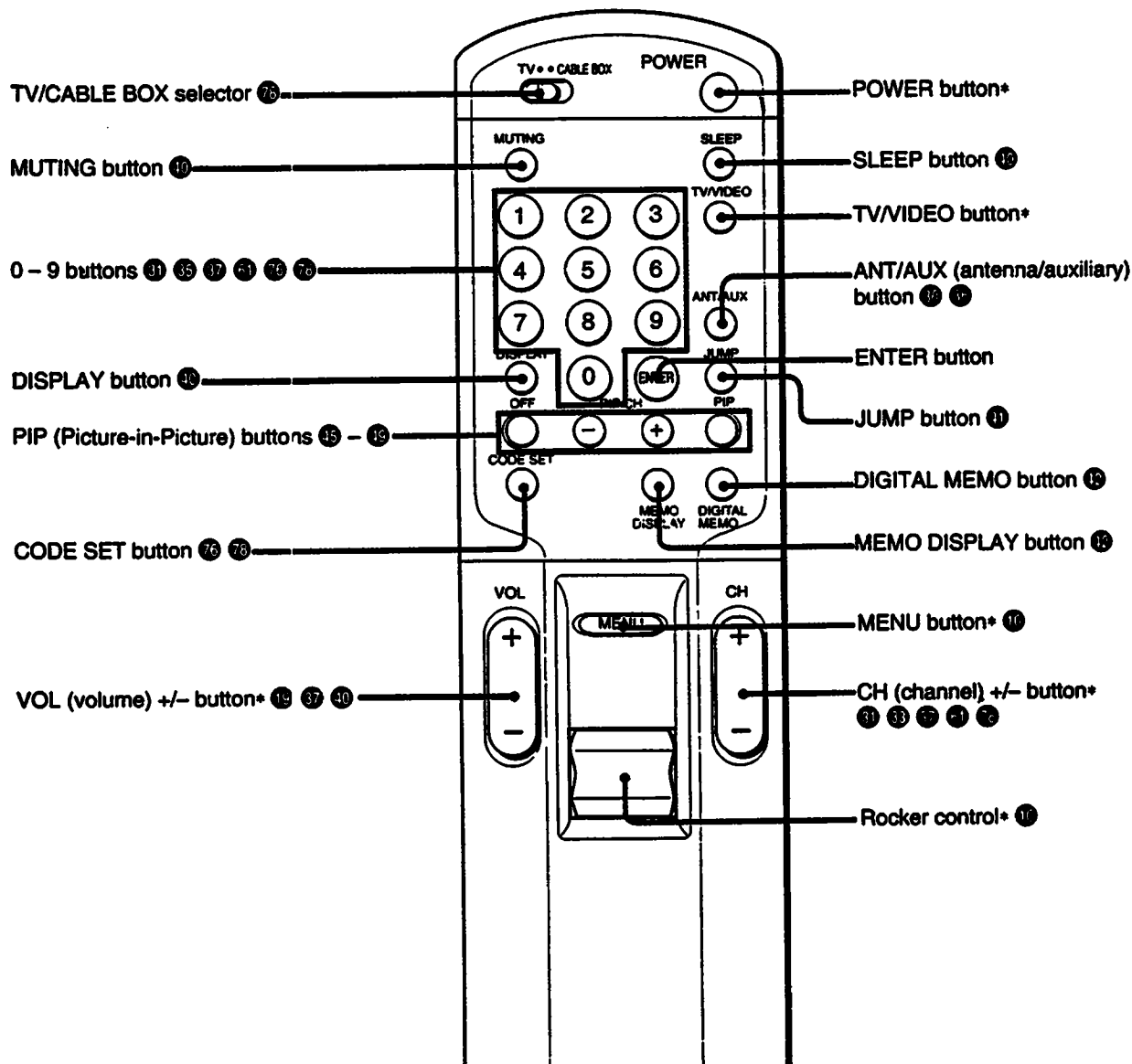
* Buttons with the same function are also located on the Remote Commander (p. 10).

Note
The instructions in this manual are based for the most part on operating the projection TV with the Remote Commander. You can also use the buttons on the projection TV that have the same function.
The following are controls that are of different types, but have exactly the same function.

Projection TV	A/V window ▲+ / ▼- buttons	RETURN button
Remote Commander	Rocker control (press up or down)	Rocker control (click)



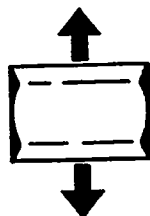
Remote Commander RM-Y114A (Outer panel controls)



Using the rocker control

Use the rocker control to make on-screen menu selections (see p. 22).

Press the control up or down to make a selection.



Click the control to execute the selection.



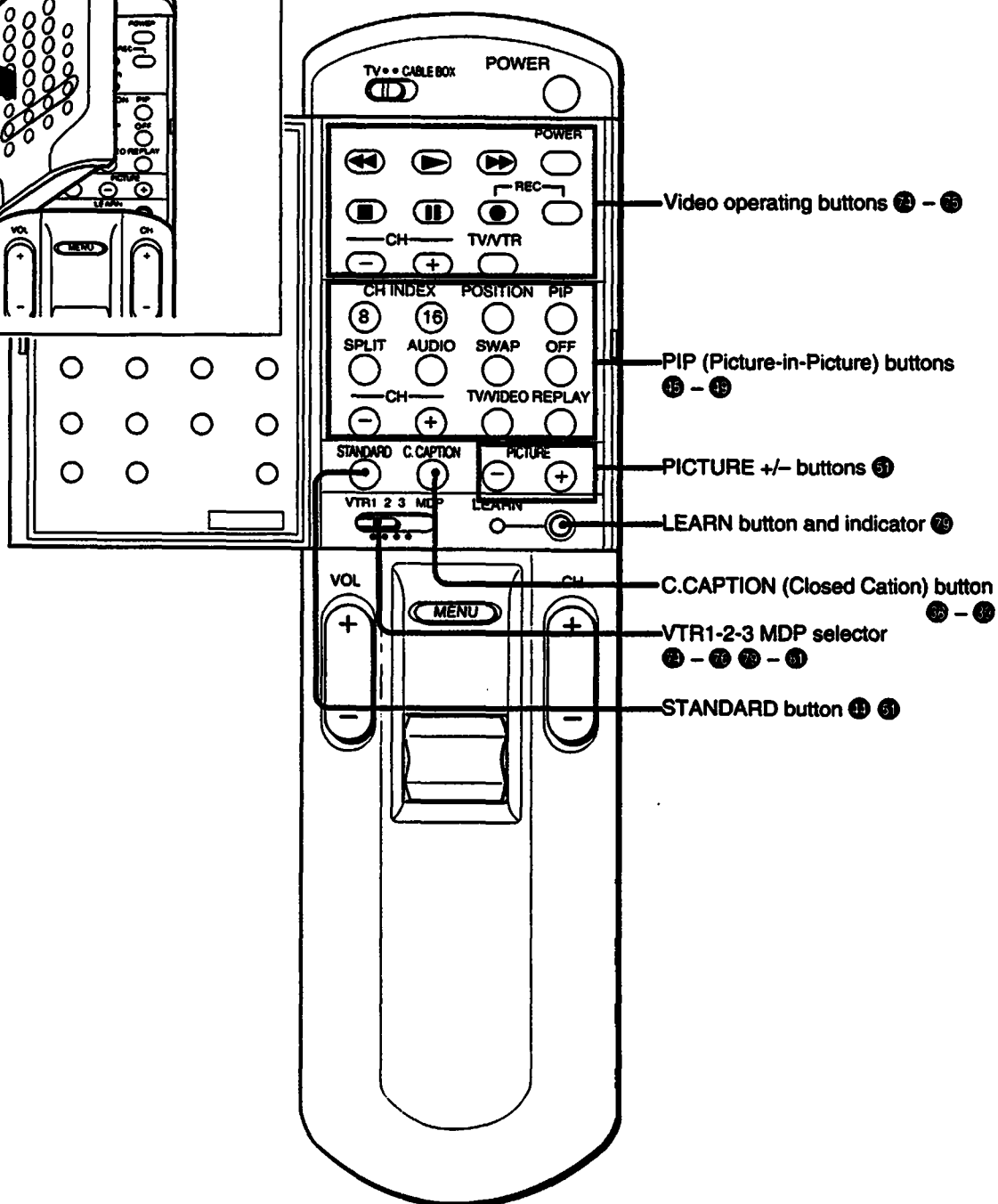
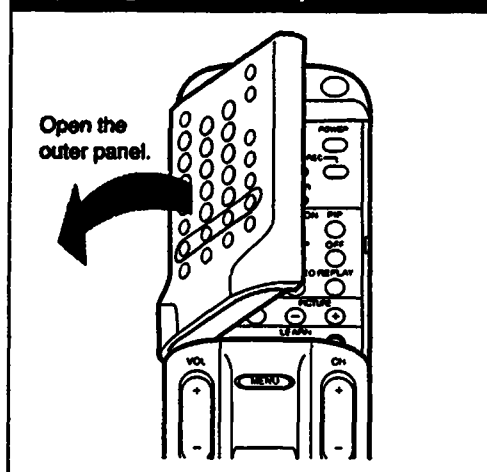
* Buttons with the same function are also located on the projection TV (pp. 7 – 8).

Note

If the TV/CABLE BOX selector is set to CABLE BOX, the Remote Commander is able to control a connected cable box, not the projection TV (p. 74). Set the selector to TV to control the projection TV with the Remote Commander.

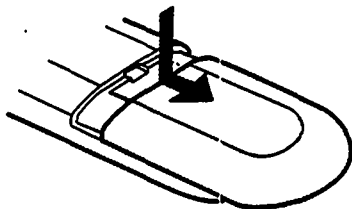
Remote Commander RM-Y114A (Inner panel controls)

Opening to the inner panel

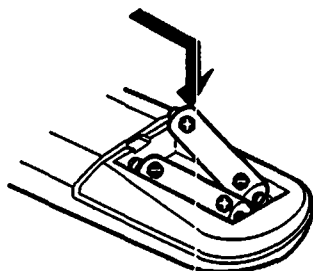


Installing batteries in the Remote Commander

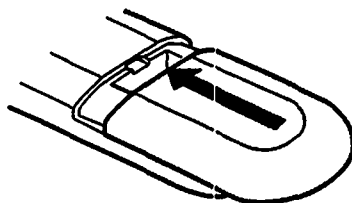
- 1 Push open the lid (rear of the Remote Commander).



- 2 Install two size AA (R6) batteries so that the \oplus and \ominus ends are inserted as shown.



- 3 Replace the lid.



About battery life

Under normal operation, batteries will last up to half a year. If the Remote Commander does not operate properly, the batteries might be worn out. Replace both of them with new ones.

To avoid damage from possible battery leakage

Remove the batteries if you do not plan to use the Remote Commander for a fairly long time.

Making Antenna Connections

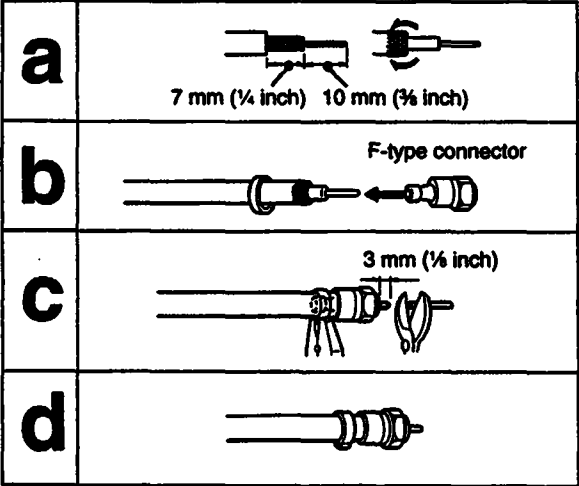
Although you can use either an indoor or outdoor antenna with the projection TV, an outdoor antenna will provide you with better picture quality.
You can receive cable TV by connecting a cable supplied by your local cable company.

Connecting a VHF, UHF or VHF/UHF combination antenna*, or CATV cable

Check your antenna cable type. If you have 75-ohm coaxial cable (round), attach an F-type connector (not supplied). If you have 300-ohm twin-lead cable (flat), attach a 300-75 ohm adaptor (not supplied).

Using 75-ohm coaxial cable (round)

- 1** Prepare the end of the cable by attaching the F-type connector as shown below.

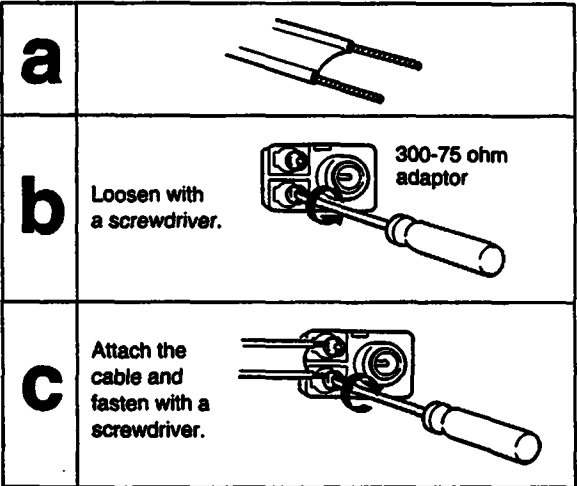


- 2** Plug the connector into the VHF/UHF terminal at the rear of the projection TV.

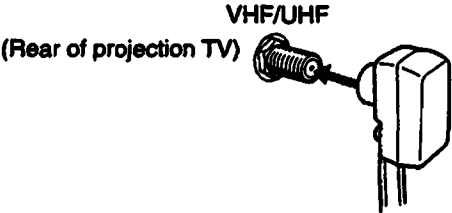


Using 300-ohm twin-lead cable (flat)

- 1** Prepare the end of the cable by attaching the 300-75 ohm adaptor as shown below.



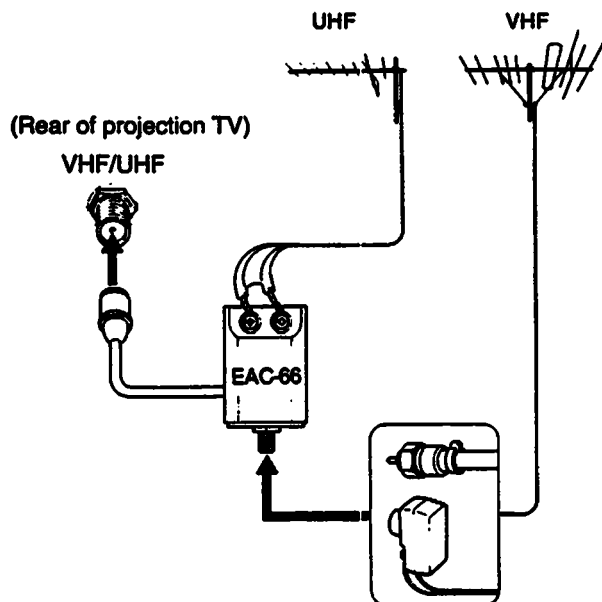
- 2** Plug the adaptor into the VHF/UHF terminal at the rear of the projection TV.



* Most combination antennas are equipped with a signal splitter. Remove the splitter and attach the appropriate connector.

Making Antenna Connections

Connecting both VHF and UHF antennas



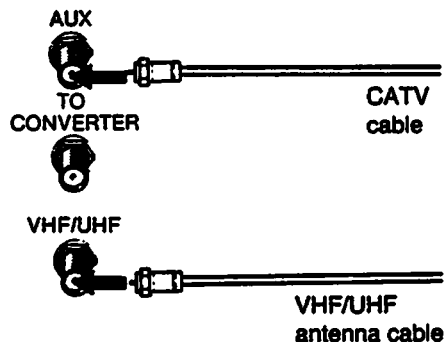
Use an EAC-66 U/V mixer (not supplied).

- 1** Prepare the VHF antenna cable using the appropriate connector (p. 13).
- 2** Connect the cable to the U/V mixer.
- 3** Connect the U/V mixer to the VHF/UHF terminal.

When you use the U/V mixer
Snow and noise may appear in the picture when viewing cable TV channels over 37 (W + 1).

Connecting both VHF/UHF antennas and a CATV cable

(Rear of projection TV)

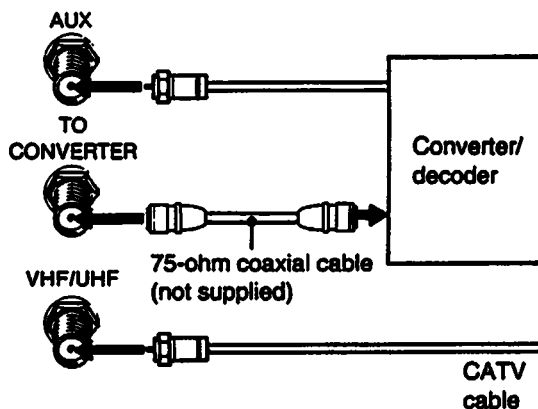


Note

Do not connect anything to the TO CONVERTER terminal in this case.

Connecting a cable with a pay cable TV system converter/decoder*

(Rear of projection TV)



Pay cable TV systems use scrambled or encoded signals and require special converters (decoders) in addition to the normal cable connection.

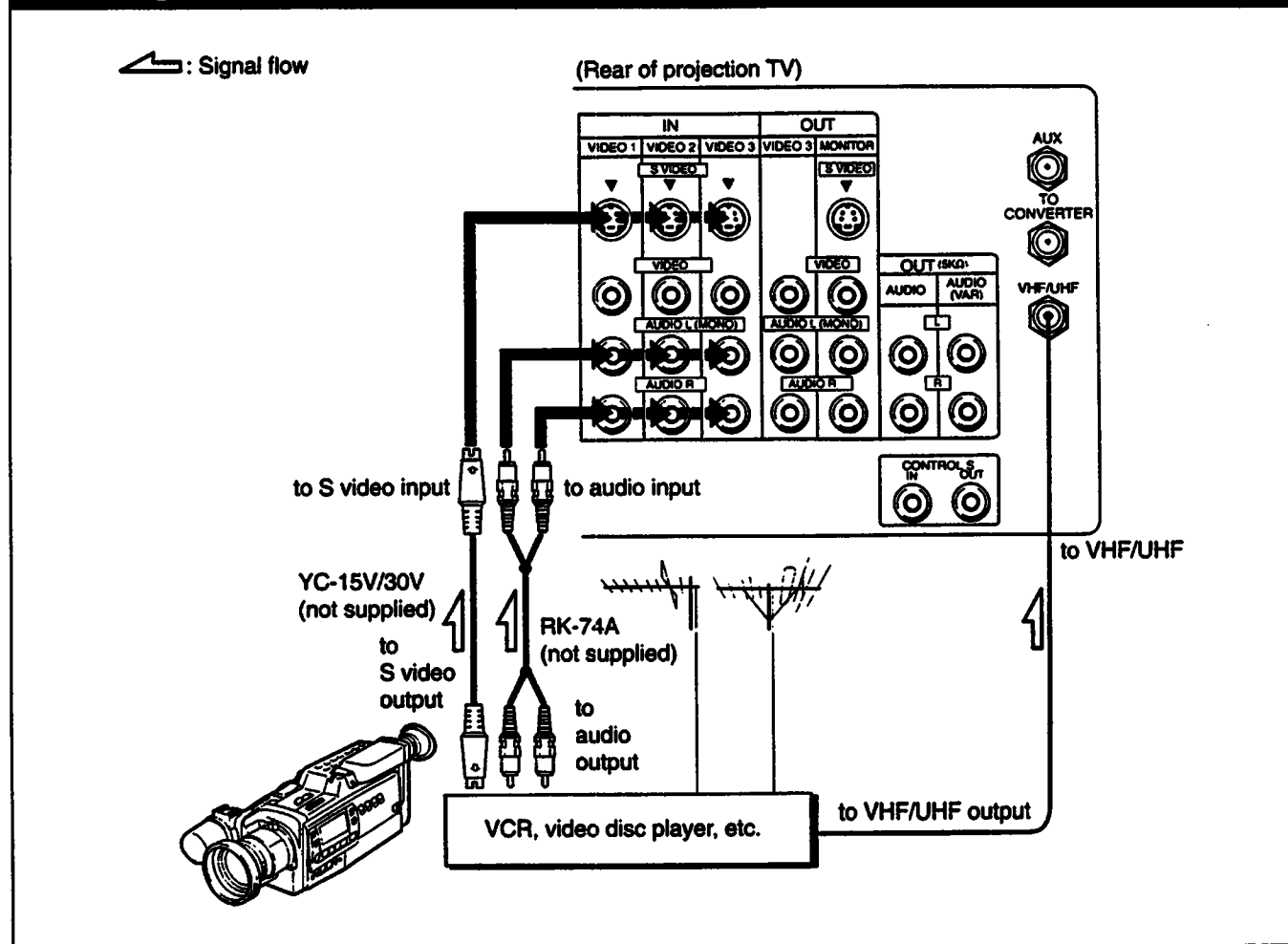
* The special converter/decoder will be supplied by the cable company.

Connecting Other Equipment

After making these connections, you will be able to do the following:

- View the playback of video tapes
- Record TV programs
- Record one TV program while viewing another program

Connecting a VCR, video disc player or Camcorder equipped with an S video output jack



Preparing for use

- 1 Turn on the projection TV.
- 2 Set S-VIDEO to "ON" (p. 54).
- 3 Press TV/VIDEO on the projection TV or on the Remote Commander so that "VIDEO 1," "VIDEO 2" or "VIDEO 3" appears on the screen.
VIDEO 1: for equipment connected to VIDEO 1 IN
VIDEO 2: for equipment connected to VIDEO 2 IN
VIDEO 3: for equipment connected to VIDEO 3 IN

To return to TV mode

Press TV/VIDEO or CHANNEL +/- on the projection TV, or press TV/VIDEO, CH +/- or 0 - 9 and ENTER on the Remote Commander so that a channel number appears on the screen.

Note

You can watch both a TV and a VCR image at once, using Picture-in-Picture (pp. 45 - 49).

Operating the equipment

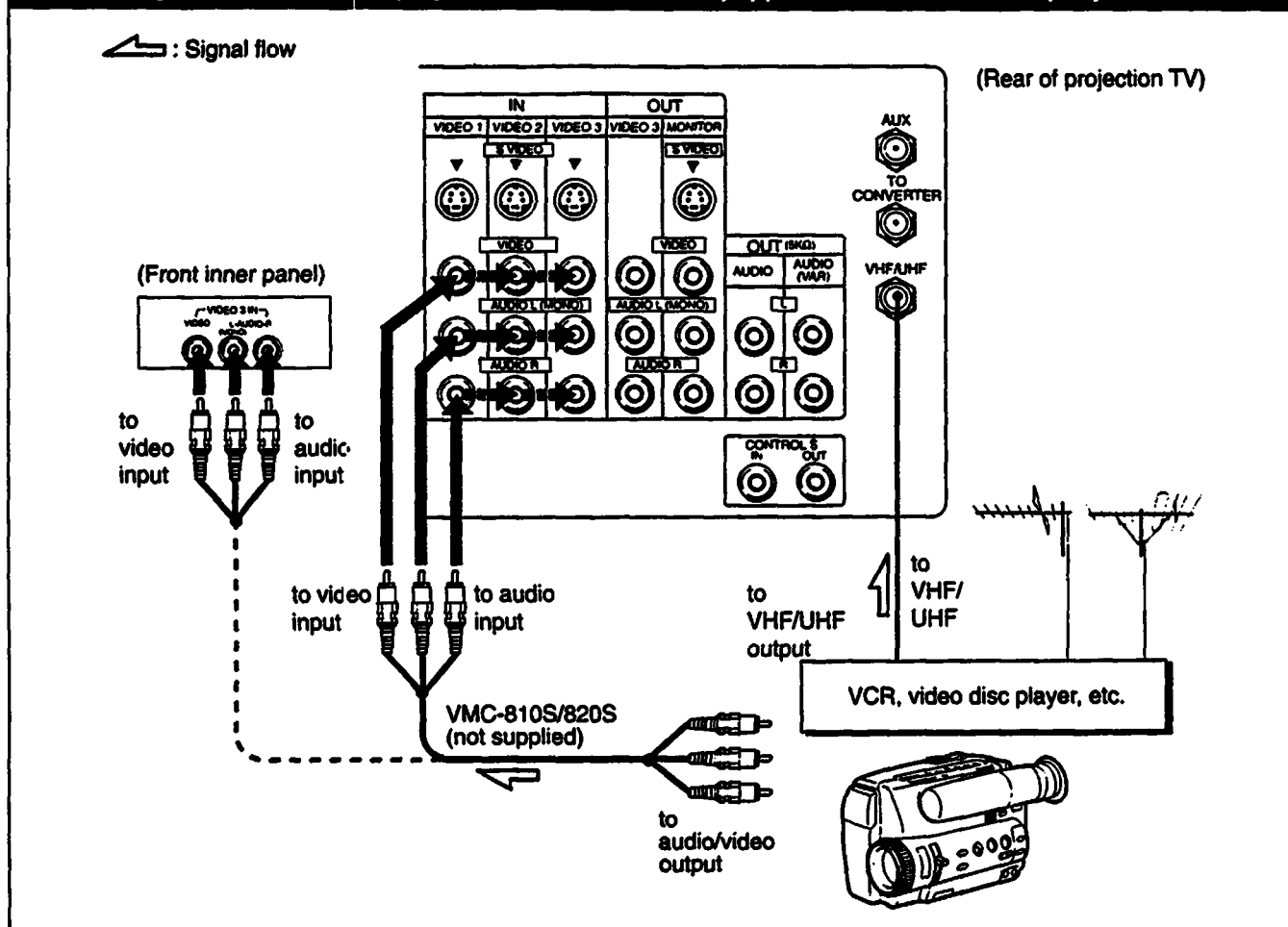
To operate the video equipment, refer to the instruction manual that comes with the equipment.

You can operate a Sony VCR or video disc player, or a non-Sony VCR with the supplied Remote Commander. For details, see "Using the Programmable Remote Commander" (pp. 74 - 81).

About S video input

Video input and output signals can be separated into Y (luminance or brightness) and C (chroma or color) signals. Usually these two signals are combined in a VCR and sent as one signal to a projection TV. Separation of the Y and C signals prevents them from interfering with one another, thereby improving picture (especially color) quality. This projection TV is equipped with S video input jacks through which these separated signals can be input directly.

Connecting a VCR, video disc player or Camcorder not equipped with an S video output jack



Preparing for use

- 1 Turn on the projection TV.
- 2 Press TV/VIDEO on the projection TV or on the Remote Commander so that "VIDEO 1," "VIDEO 2" or "VIDEO 3" appears on the screen.
VIDEO 1: for equipment connected to VIDEO 1 IN
VIDEO 2: for equipment connected to VIDEO 2 IN
VIDEO 3: for equipment connected to VIDEO 3 IN

Operating the equipment

Same as p. 15.

To return to TV mode

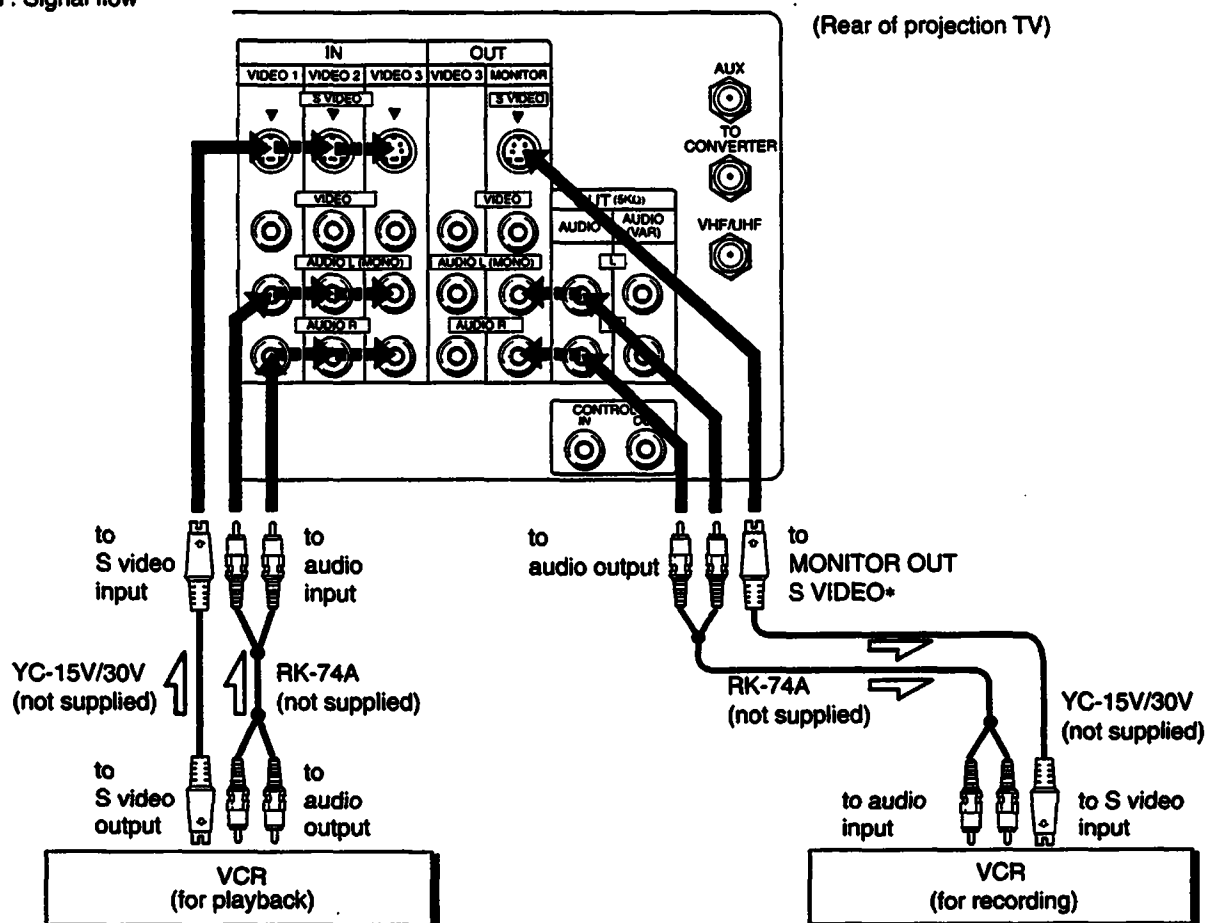
Press TV/VIDEO or CHANNEL +/- on the projection TV, or press TV/VIDEO, CH +/- or 0 - 9 and ENTER on the Remote Commander so that a channel number appears on the screen.

Notes

- If you try to use equipment that is connected to the front and rear VIDEO 3 IN jacks at the same time, the picture will be distorted. Be sure you turn off one piece of equipment first.
- If you have connected to a Camcorder's input jacks, do not connect to the projection TV's input jacks.
- You can label each of the video input modes (p. 59).
- You do not need to select a video mode when you use the direct play function (pp. 76 - 77).
- If you connect a monaural VCR, connect the audio output of the VCR to the L (MONO) jack of VIDEO IN (1, 2 or 3). The monaural sound will be heard from both speakers.
- If equipment is connected to the rear VIDEO 3 IN S video jack, and you want to watch the signal input from the front VIDEO 3 IN jacks, set S-VIDEO to "OFF."

Connecting two VCRs (equipped with an S video output jack) for tape editing

↗ : Signal flow



Preparing for use/Operating the equipment

Same as p. 15.

Note

Do not change the input signal while editing through MONITOR OUT, or the output signal will also change.

- * It is not necessary to connect to the MONITOR OUT S VIDEO jack to receive the S video input signal. You can make the connection as shown above, or connect the MONITOR OUT jacks to the VCR for recording, using the VMC-810S/820S connector (not supplied).

Caution

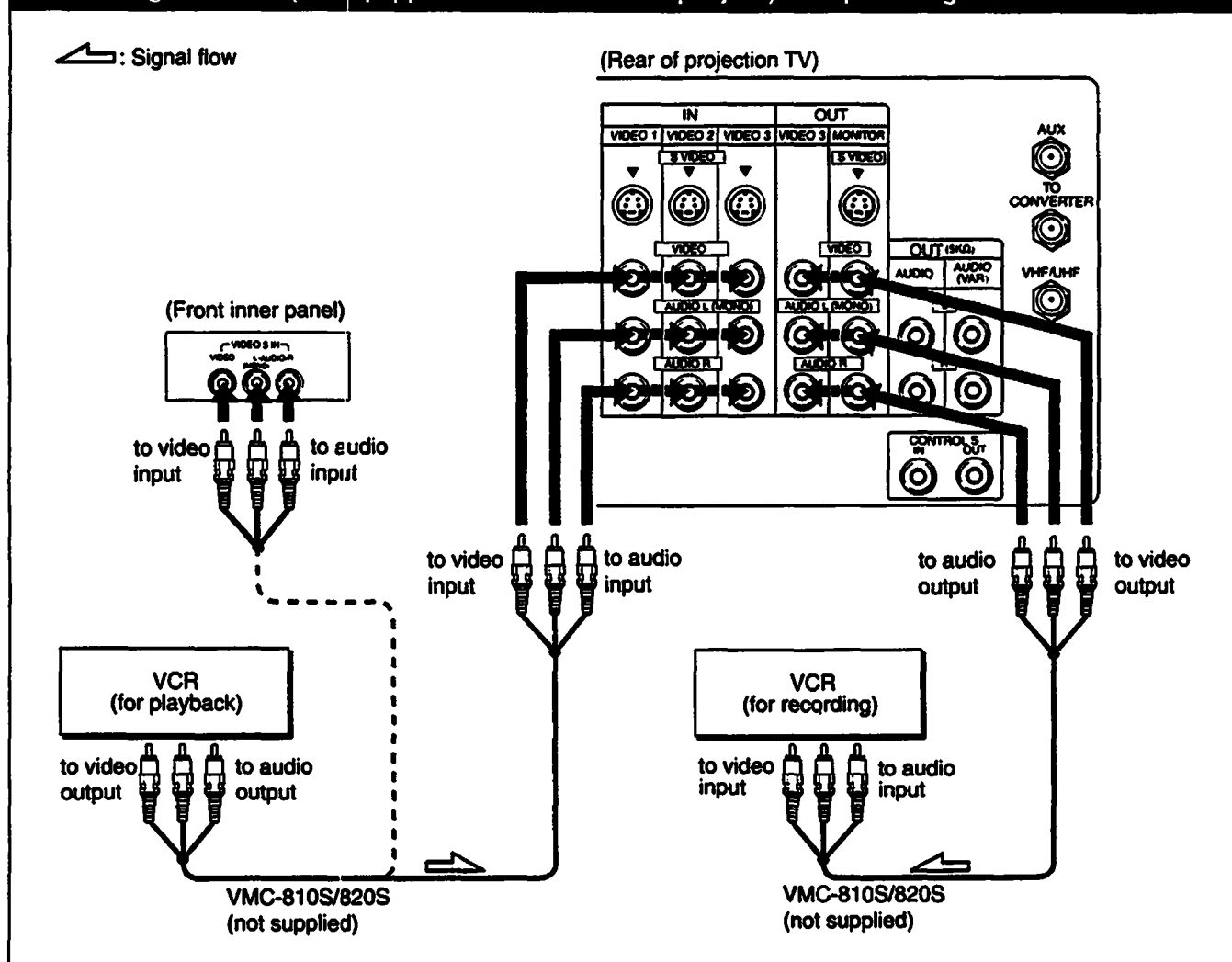
Video tapes and other materials may be copyrighted. Unauthorized recording of such material may be contrary to the provisions of the copyright laws.

About the CONTROL S jacks

Make the following connections to control the projection TV and connected equipment with one Remote Commander.

- Connect the equipment to CONTROL S IN to control the projection TV with the other equipment's remote commander.
- Connect the equipment to CONTROL S OUT to control the other equipment with the projection TV's Remote Commander.

Connecting two VCRs (not equipped with an S video output jack) for tape editing



Preparing for use

- 1 Turn on the projection TV.
- 2 Press TV/VIDEO on the projection TV or on the Remote Commander so that "VIDEO 1" "VIDEO 2" or "VIDEO 3" appears on the screen.
VIDEO 1: for equipment connected to VIDEO 1 IN
VIDEO 2: for equipment connected to VIDEO 2 IN
VIDEO 3: for equipment connected to VIDEO 3 IN

Notes

- If you try to use equipment that is connected to the front and rear VIDEO 3 IN jacks at the same time, the picture will be distorted. Be sure you turn off one piece of equipment first.
- If you have connected to a Camcorder's input jacks, do not connect to the projection TV's input jacks.
- If you connect equipment to the rear VIDEO 3 IN S VIDEO jack, you cannot receive the output signal from the VIDEO 3 OUT VIDEO jack.

Watching a different image while duplicating

The VIDEO 3 OUT jacks only output the signal from the VIDEO 3 input jacks.

If you connect a VCR for playback to the front or rear VIDEO 3 IN jacks, and a VCR for recording to the VIDEO 3 OUT jacks to duplicate your recorded tapes, you can watch input images different from the image being output for recording.

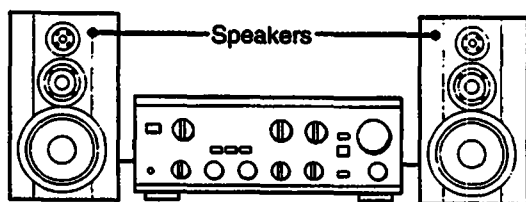
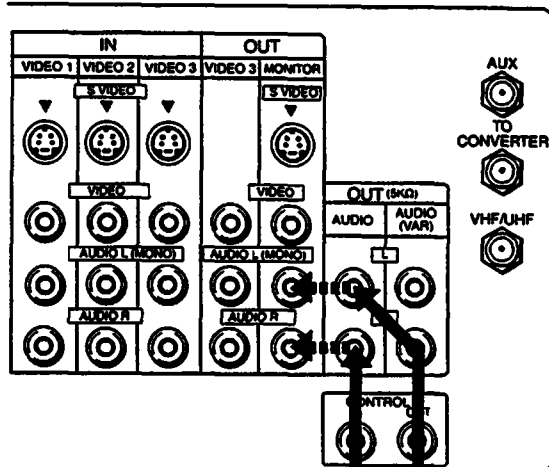
To watch a different input image

Press TV/VIDEO on the projection TV or on the Remote Commander to select the input image you want to watch.

Connecting a stereo audio system

← : Signal flow

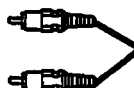
(Rear of projection TV)



Stereo amplifier

Set the amplifier's function to line input.

to line input



to audio output


RK-74A (not supplied)

Preparing for use

Display the mode set menu and set **SPEAKER** to "CENTER" to cut off the projection TV speaker sound (p. 59), and listen to the projection TV's sound solely through the audio system speakers.

Note

If your audio system is equipped with Dolby® Pro Logic, you can use the projection TV speakers as center speakers.

- * Manufactured under license from Dolby Laboratories Licensing Corporation. Additionally licensed under one or more of the following patents: U.S. numbers 3,632,886, 3,746,792 and 3,959,590. "Dolby" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

Adjusting the sound level

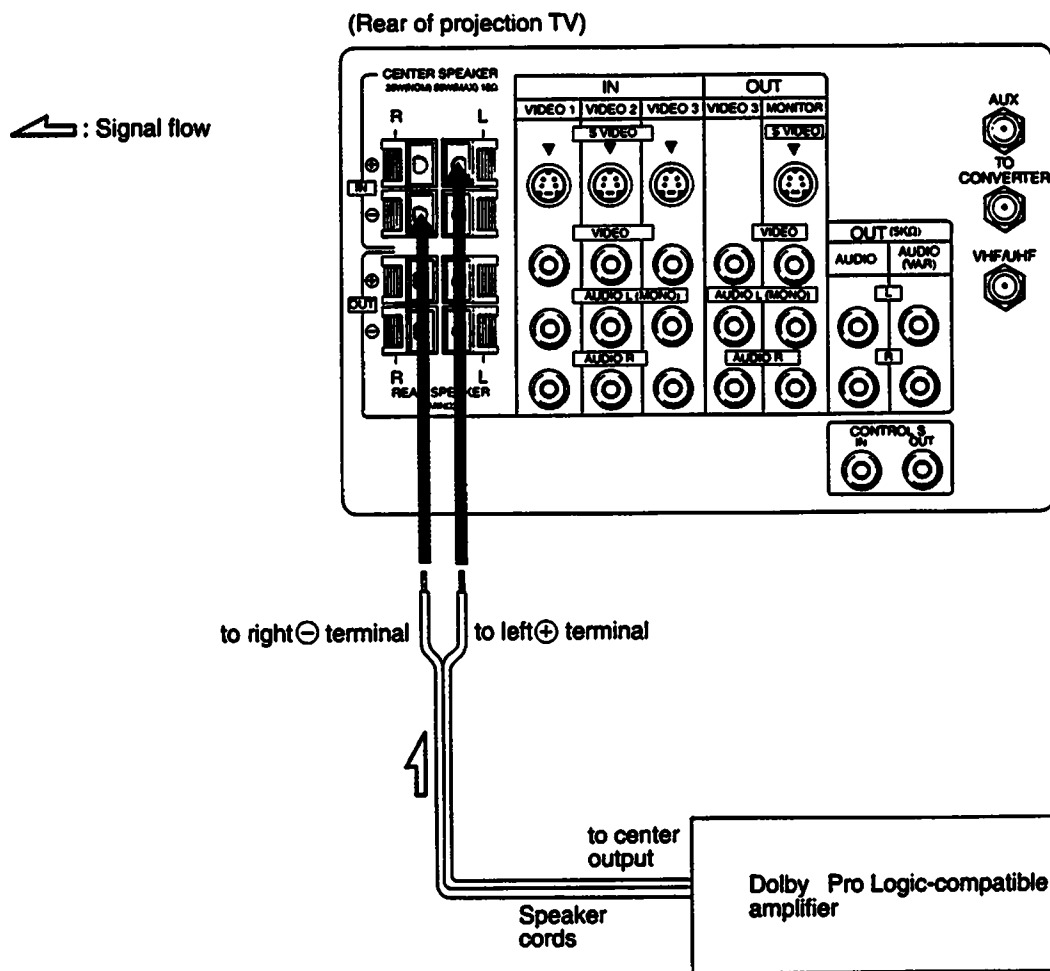
If you connect your stereo system to **AUDIO (VAR) OUT**, leave the amplifier volume, bass and treble controls at their mid-position, and adjust the level with the **VOLUME +/-** buttons on the projection TV or the **VOL +/-** buttons on the Remote Commander.

If you connect your stereo system to **AUDIO OUT**, adjust the speaker volume with the stereo amplifier controls.

Note

By connecting to **AUDIO (VAR) OUT**, you can adjust the bass, treble and balance, or select a sound mode or an MTS (Multichannel TV Sound) mode, using the on-screen menus (pp. 55 – 58).

Using the TV speakers as center speakers



Preparing for use

You can only connect a Dolby Pro Logic-compatible amplifier to CENTER SPEAKER IN; always make the connection as shown above. Never connect to the right (R ⊕ ⊖) or left (L ⊕ ⊖) terminals only.

After making the connections, display the mode set menu and set SPEAKER to "CENTER" to use the projection TV speakers as center speakers for your audio system (p. 59).

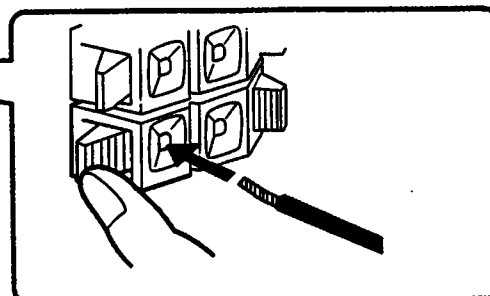
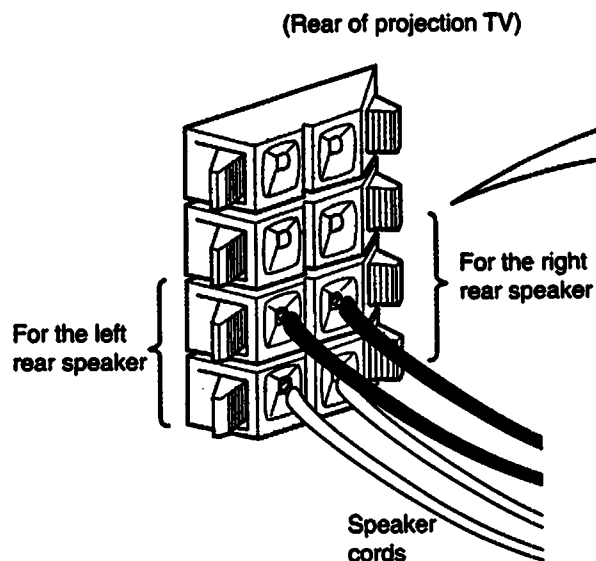
Caution

- Always turn off the amplifier power before connecting to CENTER SPEAKER IN.
- Always match the speaker cord and terminal colors when making the connection.

Adjusting the sound level

Adjust the speaker volume with the amplifier controls.

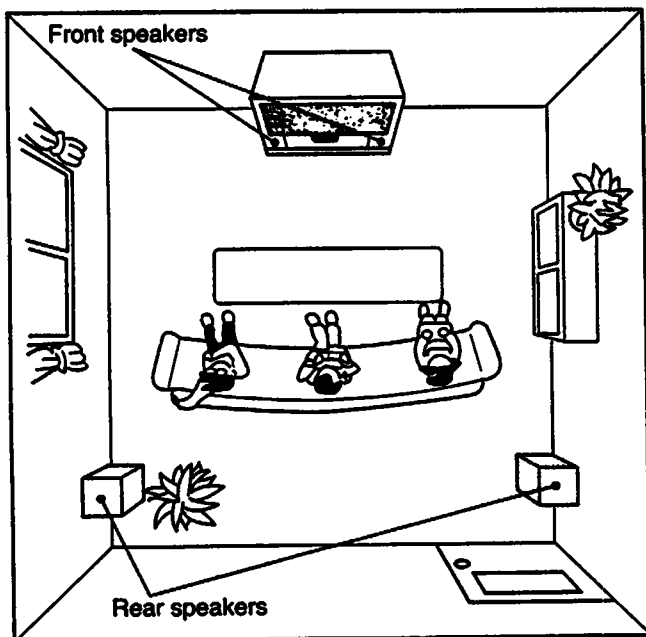
Connecting external speakers (not supplied) as rear speakers



Connect the other end of the cords to the input terminals of the corresponding speakers in the same way as shown above.

Preparing for use

You can connect optional speakers mounted to a rear wall to create a surround effect. After connecting the rear speakers, set REAR SPEAKER to "YES" (p. 60).



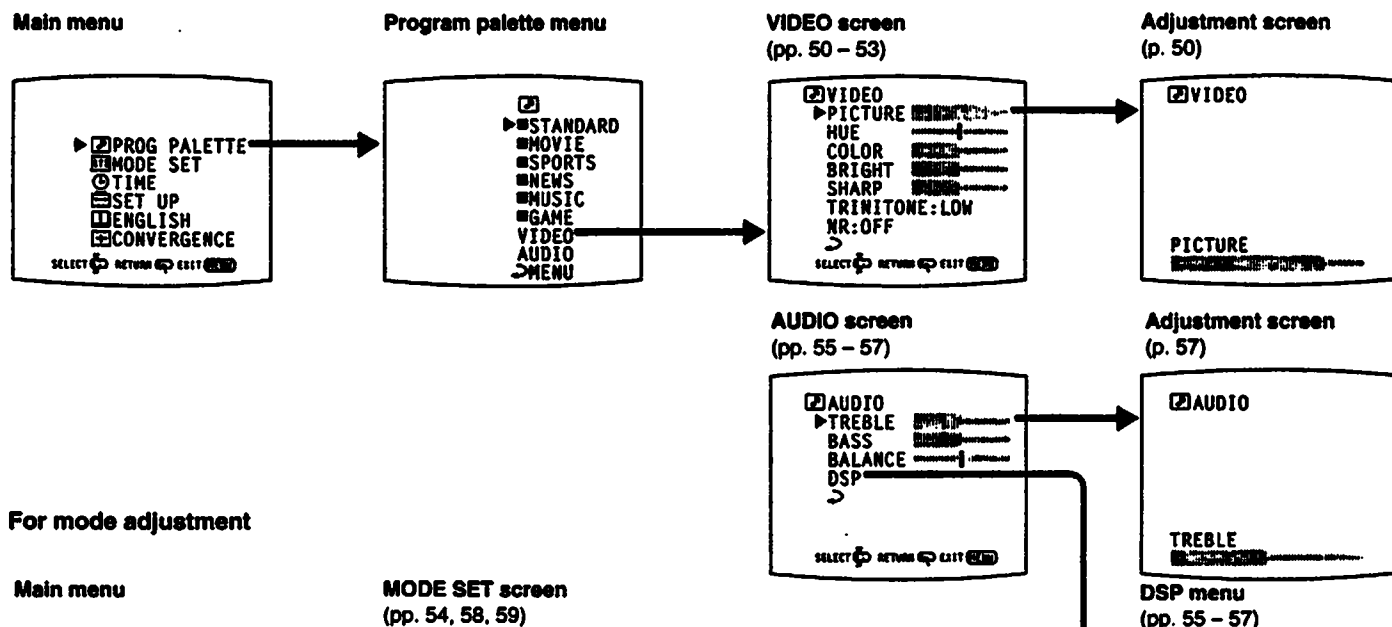
Caution

- If you connect external speakers, they must be rated at over 8-ohm impedance (with normal power holding capacity of more than 5 W).
- Always match the speaker cord and terminal colors when making the connections.
- Unplug the projection TV when making the connections. If the exposed speaker cord wires touch while the projection TV is plugged in, the projection TV may short-circuit and be damaged.
- Do not pull on the speaker cords.

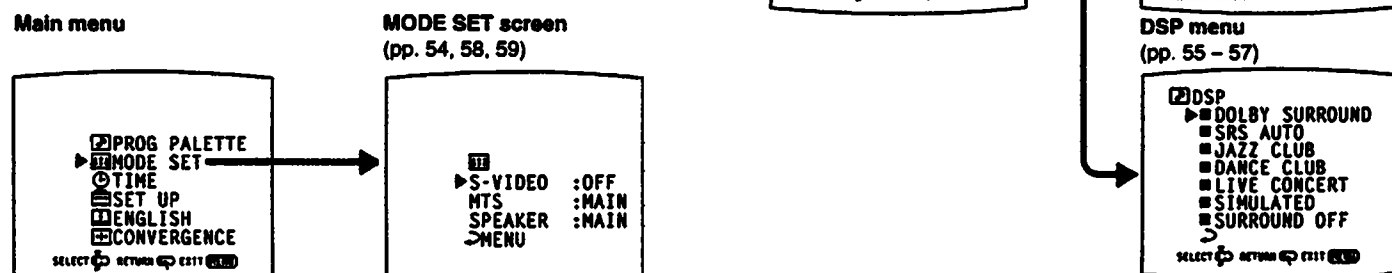
Using the On-Screen Menus

The following flow chart shows the different levels of on-screen menus that you can use to make various adjustments and settings. See the indicated pages for instructions on using each feature.

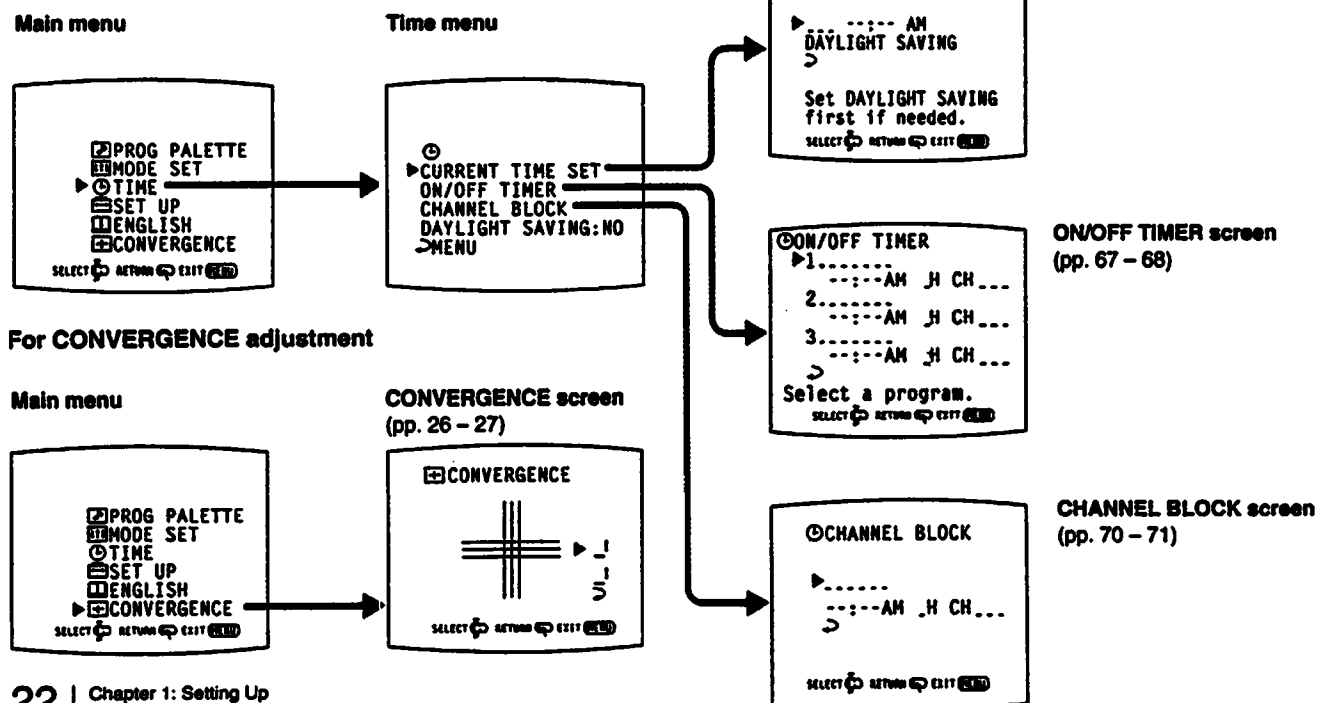
For picture and sound quality adjustment



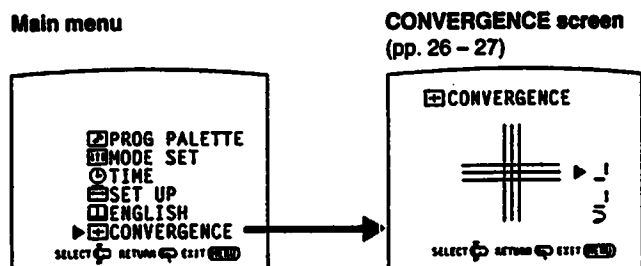
For mode adjustment



For time-related settings

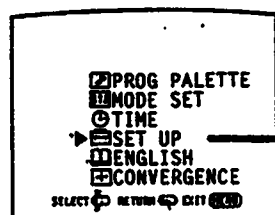


For CONVERGENCE adjustment

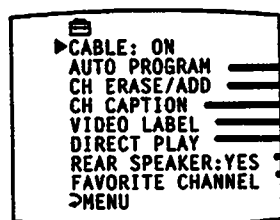


For presetting and other functions

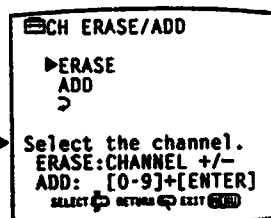
Main menu



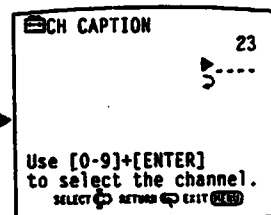
SET UP screen



AUTO PROGRAM screen
(p. 31)



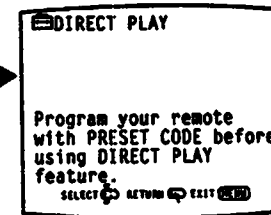
CH (channel) ERASE/ADD screen
(pp. 32, 35)



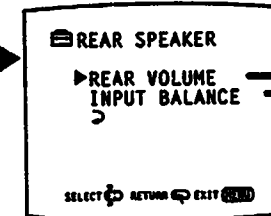
CH (channel) CAPTION screen
(pp. 60 - 61)



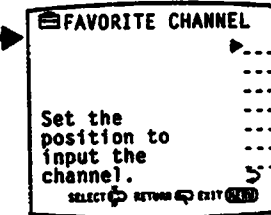
VIDEO LABEL screen
(p. 63)



DIRECT PLAY screen
(pp. 80 - 81)

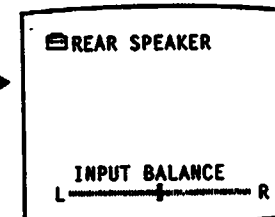
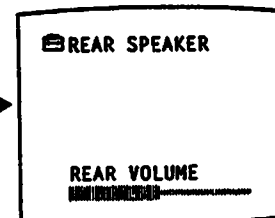


REAR SPEAKER screens (p. 60)

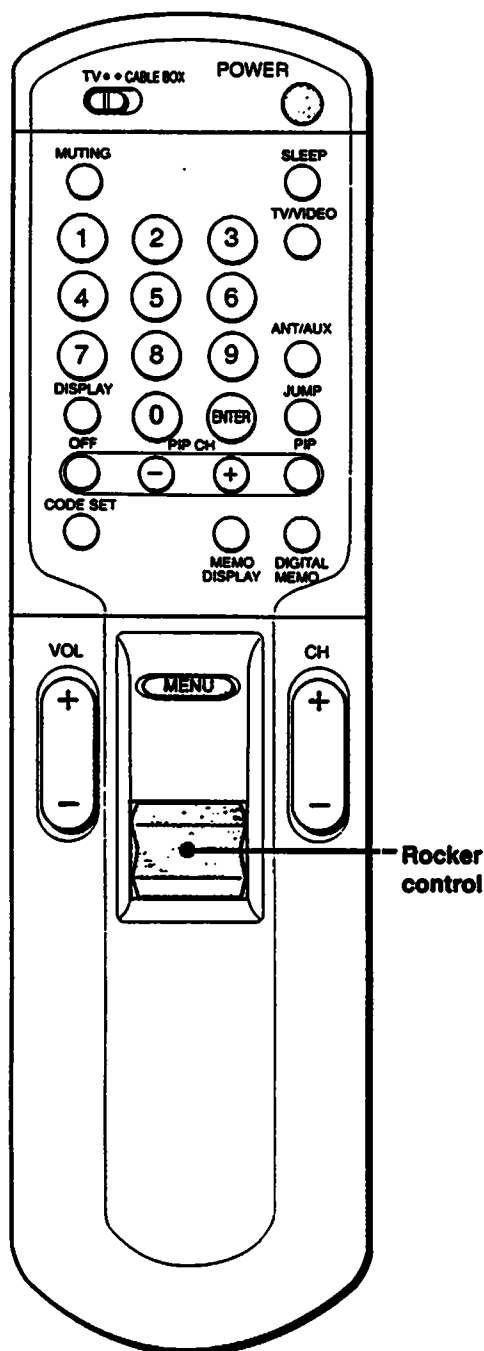


FAVORITE CHANNEL screen
(pp. 72 - 73)

Adjustment screens (p. 60)



Note
Menu items that are shaded are inactive and cannot be selected.



Navigating through the menus

To display the main menu
Press MENU.

To return to the previous menu

Press the rocker control up or down until the cursor points to "▷ MENU." Then click the rocker control.

To return to the main menu

Repeat the above, until you reach the main menu.

To return to the normal screen

Press MENU on the Remote Commander.

Changing the menu language

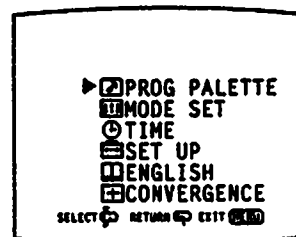
The menu language is factory-set to ENGLISH. Follow these instructions to change the menu language to Spanish or French, or back to English.

- 1 Press POWER to turn on the projection TV.
TIMER/STAND BY indicator blinks until the picture appears.

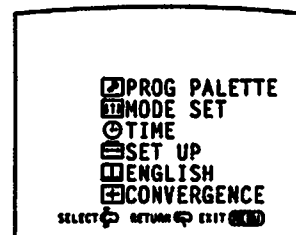
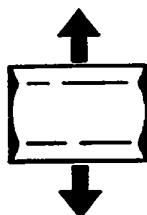
POWER



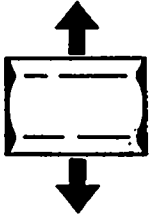
- 2 Press MENU.
The main menu appears.



- 3 Press the rocker control up or down until the cursor points to "ENGLISH." Then click the rocker control.
The language display turns red.

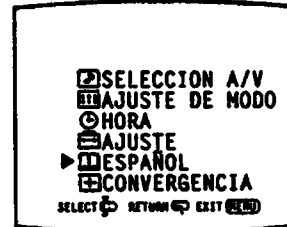


- 4** Press the rocker control up or down to select the language.
Each time you press the rocker control up or down, the "ESPAÑOL," "FRANÇAIS" and "ENGLISH" menus appear.



Note
Certain parts of the "ESPAÑOL" and "FRANÇAIS" menus remain in English.

- 5** Click the rocker control.
The language is selected.



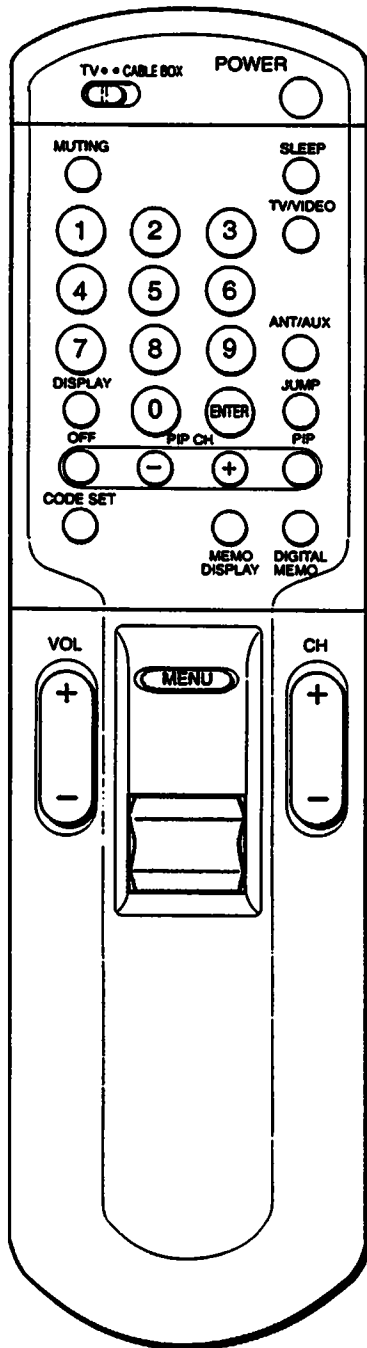
Spanish menu

To return to the normal screen.
Press MENU on the Remote Commander.

Notes concerning menus

- During PIP (Picture-in-Picture) mode, the on-screen menus may overlap the window picture.
- The menus disappear automatically, if you do not press a button within 90 seconds.

Adjusting Color Registration (CONVERGENCE)

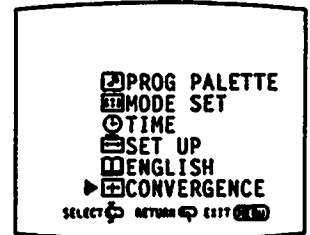


In a projection TV, the projection tube image appears on the screen in three color layers (red, green and blue). If these layers are not in proper registration, the color is poor and the picture blurs. To correct this, perform the CONVERGENCE adjustment.

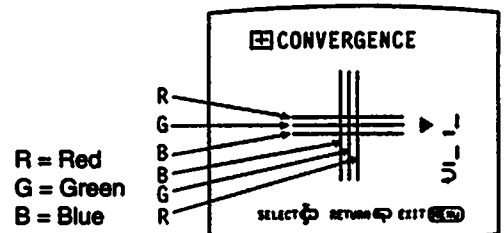
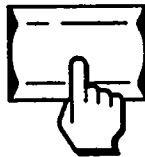
- 1 Press MENU.
The main menu appears.



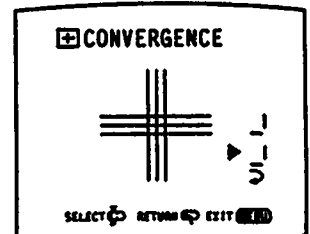
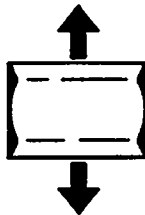
- 2 Press the rocker control up or down until the cursor points to "CONVERGENCE."



- 3 Click the rocker control.
The CONVERGENCE screen and the colored adjustment lines appear.



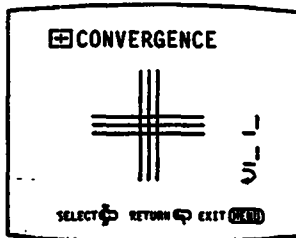
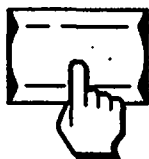
- 4 Press the rocker control up or down until the cursor points to the symbol representing the line you want to adjust (see the key below).



Adjustment line symbols key

- | (red vertical: left/right adjustment)
- (red horizontal: up/down adjustment)
- | (blue vertical: left/right adjustment)
- (blue horizontal: up/down adjustment)

- 5** Click the rocker control.
The adjustment line is selected.

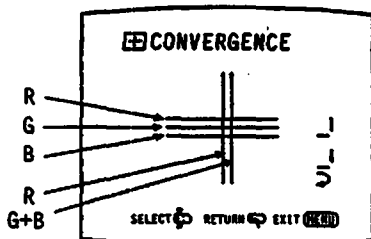


To return to the previous menu
Press the rocker control up or down until the cursor points to "➤ MENU."
Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

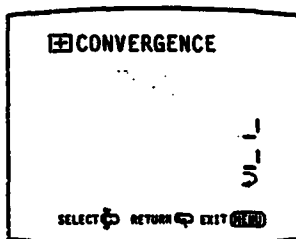
To return to the normal screen.
Press MENU on the Remote Commander.

- 6** Press the rocker control up or down until the line converges with the center green line. Then click the rocker control.

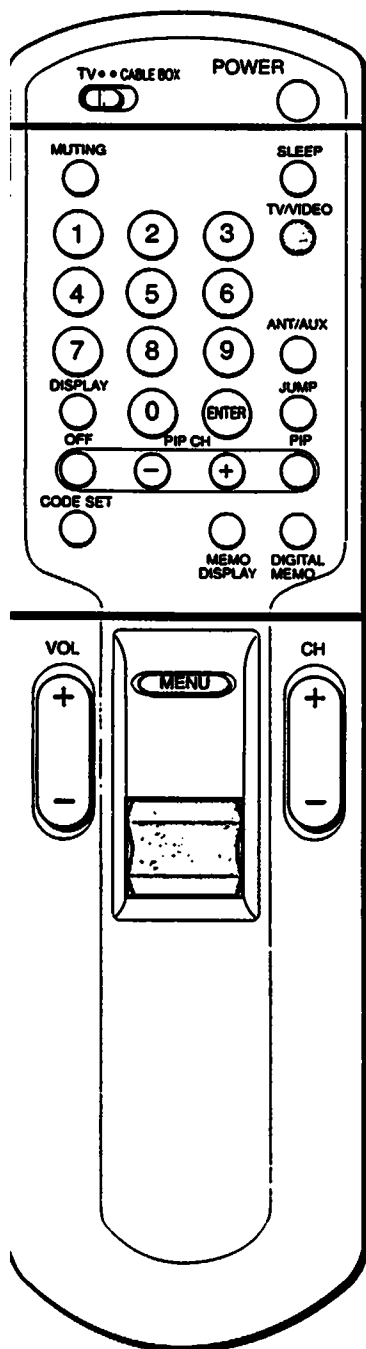


To move up To move right	Press the rocker control up.
To move down To move left	Press the rocker control down.

- 7** Repeat steps 4 – 6 to adjust the other lines, until all the lines have overlapped to form a white cross.



Setting CABLE ON or OFF

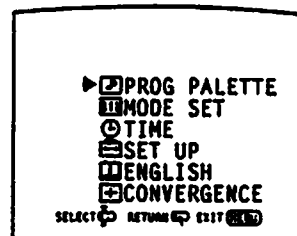


If you have cable connected to the projection TV, follow the steps below to set the cable connection on or off. Set CABLE OFF to preset or watch VHF or UHF channels, and set CABLE ON to preset or watch cable TV channels.

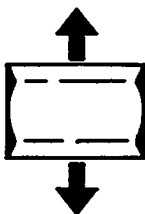
Note

If the projection TV is in video mode, the "CABLE" display is shaded and cannot be selected. Press TV/VIDEO to change to TV mode.

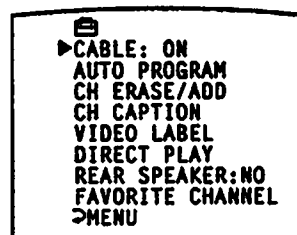
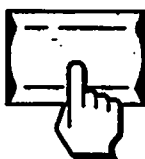
- 1 Press MENU.
The main menu appears.



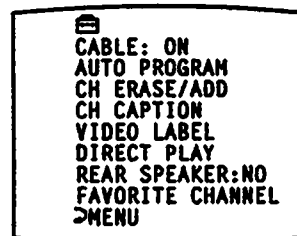
- 2 Press the rocker control up or down until the cursor points to "SET UP."



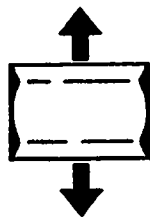
- 3 Click the rocker control.
The set up menu appears, and the cursor points to "CABLE."




- 4 Click the rocker control again.
The mode display turns red.




5 Press the rocker control up or down to select "ON" or "OFF."




 CABLE: OFF
 AUTO PROGRAM
 CH ERASE/ADD
 CH CAPTION
 VIDEO LABEL
 DIRECT PLAY
 REAR SPEAKER:NO
 FAVORITE CHANNEL
 >MENU

6 Click the rocker control. The setting is complete.




 >CABLE: OFF
 AUTO PROGRAM
 CH ERASE/ADD
 CH CAPTION
 VIDEO LABEL
 DIRECT PLAY
 REAR SPEAKER:NO
 FAVORITE CHANNEL
 >MENU

To return to the previous menu

Press the rocker control up or down until the cursor points to "> MENU."
Then click the rocker control.

To return to the main menu

Repeat the above, until you reach the main menu.

To return to the normal screen.

Press MENU on the Remote Commander.

Cable TV channel chart*

Cable TV systems use letters or numbers to designate channels. To tune in a channel, refer to the chart below.

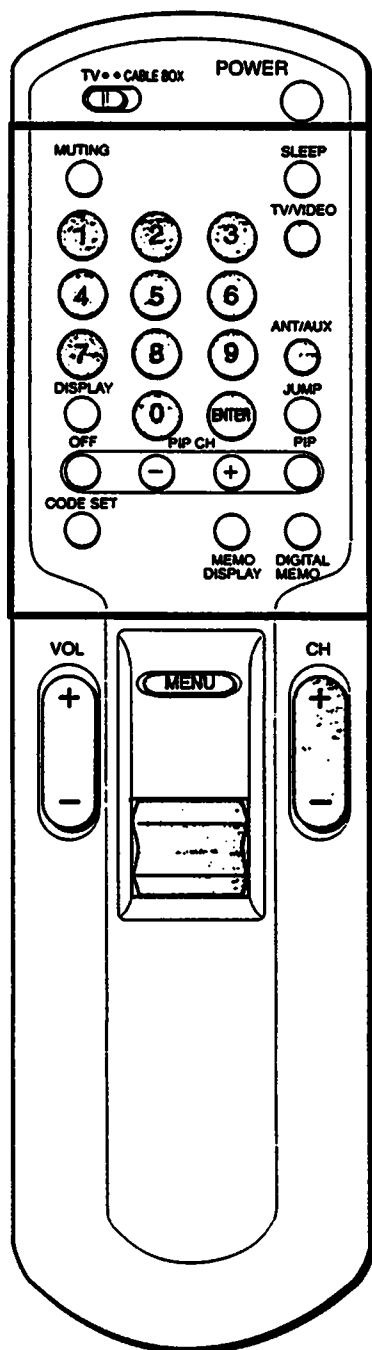
Number on this projection TV	Corresponding CATV channel
1	A-8
5	A-7
6	A-6
14	A
15	B
16	C
17	D
18	E
19	F
20	G
21	H
22	I
23	J
24	K
25	L
26	M
27	N
28	O
29	P
30	Q
31	R
32	S
33	T
34	U
35	V
36	W
37	W+1
38	W+2
39	W+3
•	•
•	•
•	•
93	W+57
94	W+58
95	A-5
96	A-4
97	A-3
98	A-2
99	A-1
100	W+59
101	W+60
102	W+61
•	•
•	•
•	•
123	W+82
124	W+83
125	W+84

Check with your local cable TV company for more complete information on the available channels.

* The designation of the cable TV channels conforms to the EIA/NCTA recommendation.

Presetting TV Channels

By presetting TV channels to the projection TV, you can select channels by pressing CH (CHANNEL) +/-.
(You can select VHF channels 2 - 13 without presetting.)



Presetting all receivable channels automatically

Follow these instructions to preset all the receivable VHF, UHF or cable TV channels to the projection TV.

Notes

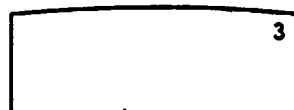
- If the projection TV is in video mode, the "AUTO PROGRAM" display is shaded and cannot be selected. Press TV/VIDEO to change to TV mode.
- Perform auto programming during the day rather than late at night, when some channels may not be broadcasting.

Outer panel

- 1 Set the cable connection on or off (pp. 28 - 29) to select the type of channel you want to preset, VHF/UHF or cable TV.



To preset VHF or UHF channels



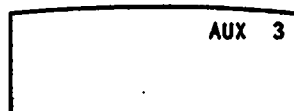
To preset cable TV channels

Press ANT/AUX to select the type of channel you want to preset, VHF/UHF/regular cable TV, or pay cable TV connected to the AUX (auxiliary) terminal.

ANT/AUX



To preset VHF, UHF or regular cable TV channels

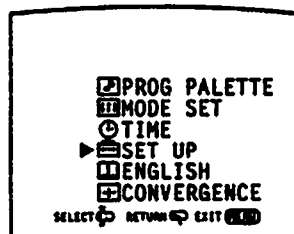
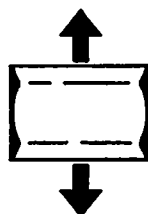


To preset pay cable TV channels

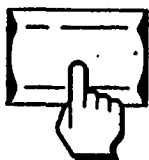
- 2 Press MENU.
The main menu appears.



- 3 Press the rocker control up or down until the cursor points to "SET UP."



- 4** Click the rocker control.
The set up menu appears.



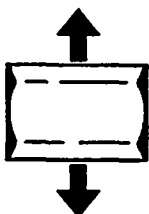
CABLE: ON
 ▶ AUTO PROGRAM
 CH ERASE/ADD
 CH CAPTION
 VIDEO LABEL
 DIRECT PLAY
 REAR SPEAKER: NO
 FAVORITE CHANNEL
 ➤ MENU

To select TV channels without presetting
Press the 0 – 9 buttons and ENTER.

To return to the previous menu
Press the rocker control up or down until the cursor points to "➤ MENU."
Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

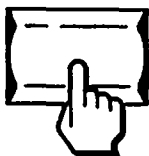
- 5** Press the rocker control up or down until the cursor points to "AUTO PROGRAM."



CABLE: ON
 ▶ AUTO PROGRAM
 CH ERASE/ADD
 CH CAPTION
 VIDEO LABEL
 DIRECT PLAY
 REAR SPEAKER: NO
 FAVORITE CHANNEL
 ➤ MENU

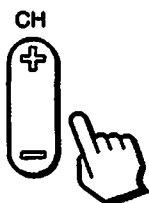
To return to the normal screen.
Press MENU on the Remote Commander.

- 6** Click the rocker control.



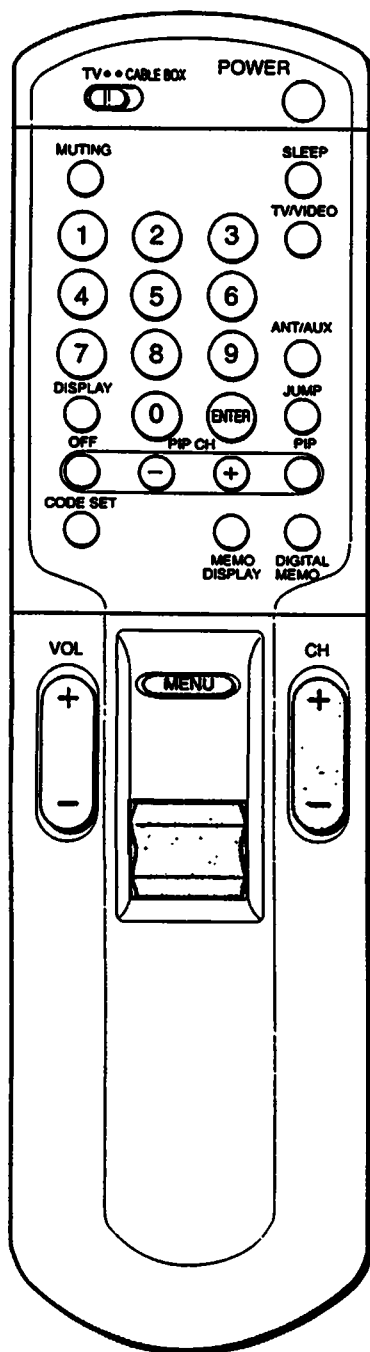
"AUTO PROGRAM" appears on the screen and receivable channels (other than the channels already preset) are preset in numerical sequence. The channels previously preset will not remain in the projection TV's memory.
When no more channels are found, auto programming stops and the screen returns automatically to the set up menu.

- 7** Press CH +/- to check or view the preset channels.



Receivable channels for this projection TV

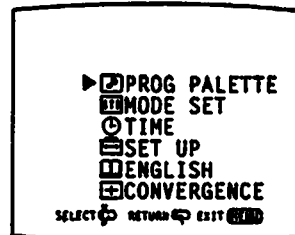
VHF: 2 – 13
 UHF: 14 – 69
 Cable: 1 – 125



Erasing TV channels

Follow these instructions to erase unnecessary TV channels, so that when you press CH +/-, the channel(s) are skipped.

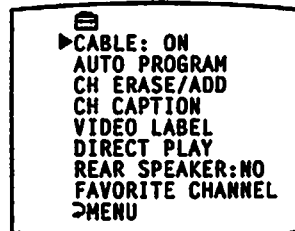
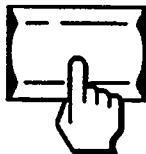
- 1 Press MENU.
The main menu appears.



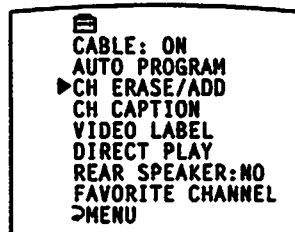
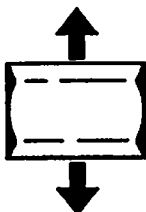
- 2 Press the rocker control up or down until the cursor points to "SET UP."



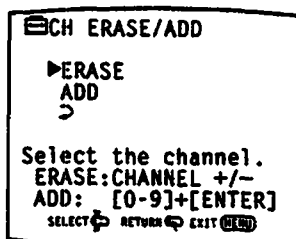
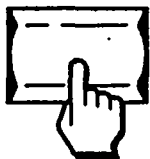
- 3 Click the rocker control.
The set up menu appears.



- 4 Press the rocker control up or down until the cursor points to "CH ERASE/ADD."



- 5** Click the rocker control.
The CH ERASE/ADD screen appears, and the cursor points to "ERASE."



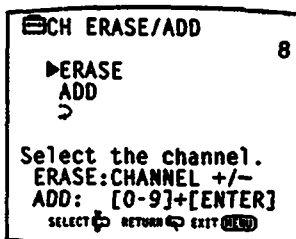
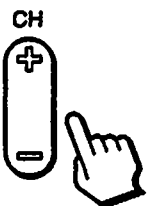
To erase another channel
Repeat steps 6 – 7.

To return to the previous menu
Press the rocker control up or down until
the cursor points to "➤ MENU."
Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the
main menu.

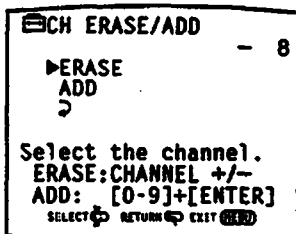
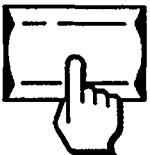
To return to the normal screen
Press MENU on the Remote Commander.

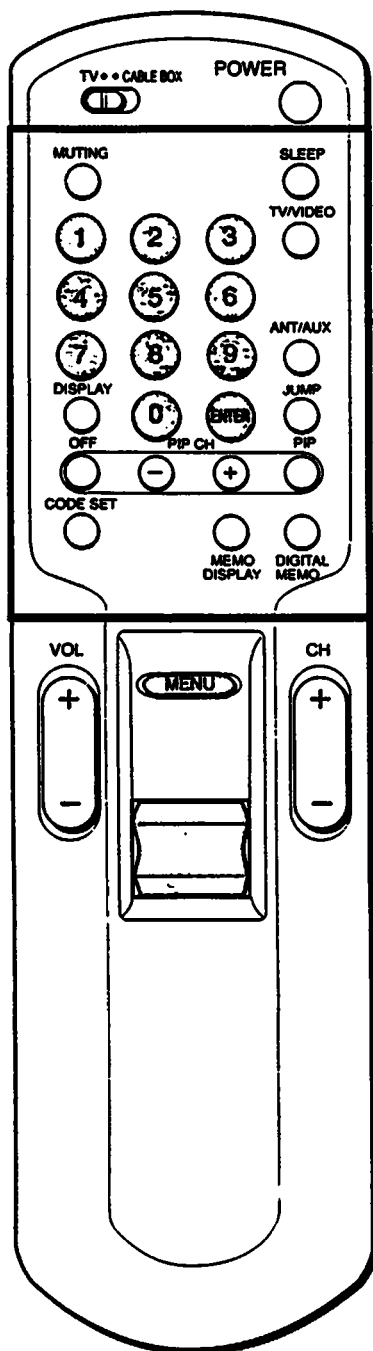
- 6** Press CH +/- to select the channel you want to erase.
The channel display appears.



Note
If you erase a VHF or UHF channel, the same
number cable TV channel is also erased (and
vice versa).

- 7** Click the rocker control.
A "-" sign appears in front of the channel number display, indicating that the channel
is erased; then the CH ERASE/ADD screen automatically reappears.



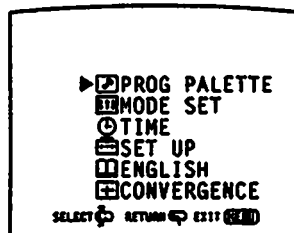


Outer panel

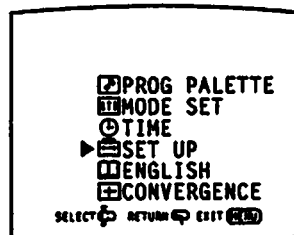
Adding TV channels

Follow these instructions to add TV channels one by one to the selection memory, or to replace a TV channel you previously erased (pp. 32 – 33).

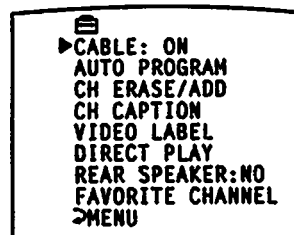
- 1 Press MENU.
The main menu appears.



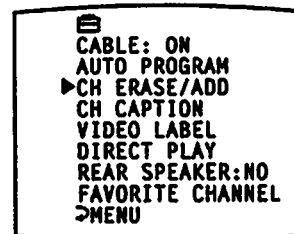
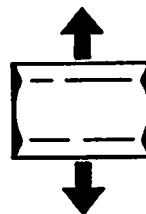
- 2 Press the rocker control up or down until the cursor points to "SET UP."



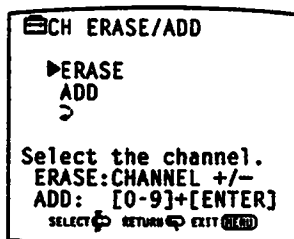
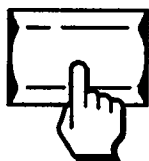
- 3 Click the rocker control.
The set up menu appears.



- 4 Press the rocker control up or down until the cursor points to "CH ERASE/ADD."



- 5** Click the rocker control.
The CH ERASE/ADD screen appears.

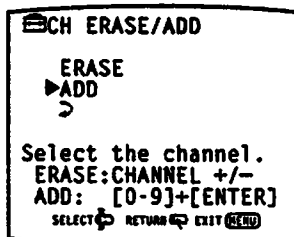
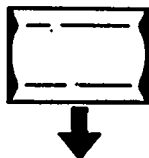


To add another channel
Repeat steps 7 – 8.

To return to the previous menu
Press the rocker control up or down until
the cursor points to "➤ MENU."
Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the
main menu.

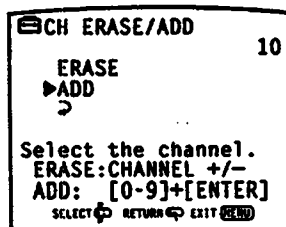
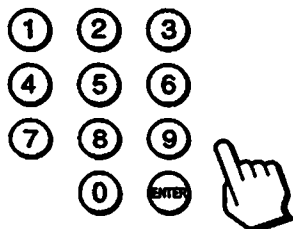
- 6** Press the rocker control down until the cursor points to "ADD."



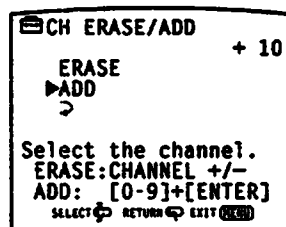
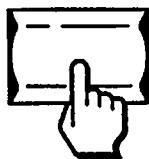
To return to the normal screen
Press MENU on the Remote Commander.

Note
If you add a VHF or UHF channel, the same
number cable TV channel is also added
(and vice versa).

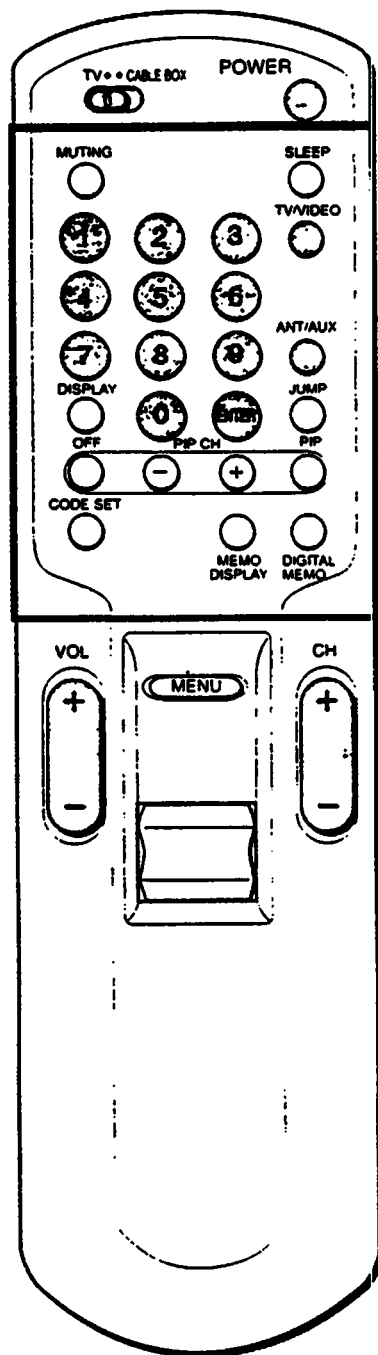
- 7** Press 0 – 9 and ENTER on the Remote Commander to select the channel
you want to add.
The channel display appears.



- 8** Click the rocker control.
A "+" sign appears in front of the channel number display, indicating that the
channel is added; then the CH ERASE/ADD screen automatically reappears.



Watching TV Programs



Outer panel

Make sure that the TV/CABLE BOX selector on the Remote Commander is set to TV, in order to control the projection TV with the Remote Commander.

- 1** Press POWER to turn on the projection TV.
TIMER/STAND BY indicator blinks until the picture appears.

POWER



- 2** Set the cable connection on or off (pp. 28 – 29) to select the type of channel you want to watch, VHF/UHF or cable TV.



To watch VHF
or UHF channels



To watch
cable TV channels

Press ANT/AUX to select the type of channel you want to watch, VHF/UHF/regular cable TV, or pay cable TV connected to the AUX (auxiliary) terminal.

ANT/AUX



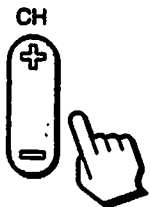
To watch VHF, UHF
or regular cable
TV channels



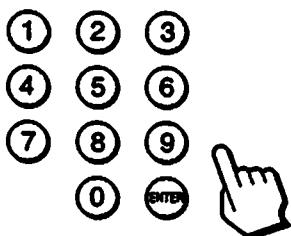
To watch pay cable
TV channels

3 Select a channel in one of the following two ways:

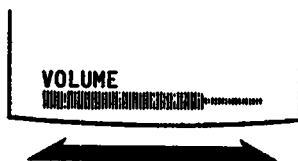
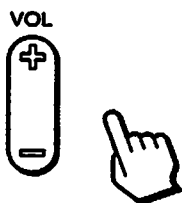
To scan the preset channels in numerical sequence, press CH +/-.



To select a channel directly, press 0 – 9 and then ENTER.
For example, to select channel 10, press 1, 0 and ENTER.



4 Press VOL +/- to adjust the volume.



Press + to increase the volume.
Press - to decrease the volume.

If VIDEO 1, VIDEO 2 or VIDEO 3 appears on the screen

Press TV/VIDEO until a TV channel number appears.

To select channels more easily

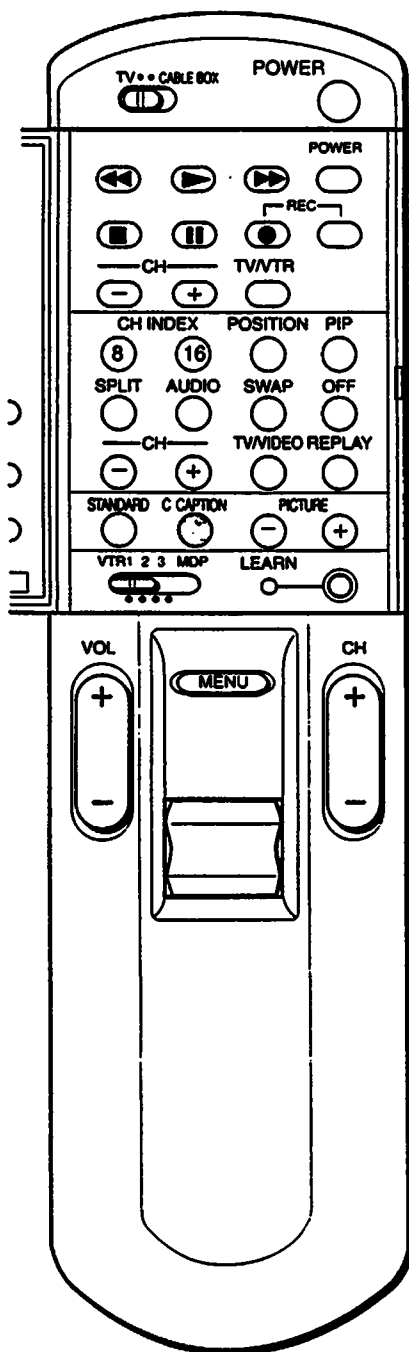
Set FAVORITE CHANNEL (pp. 72 – 73).

To turn off the projection TV

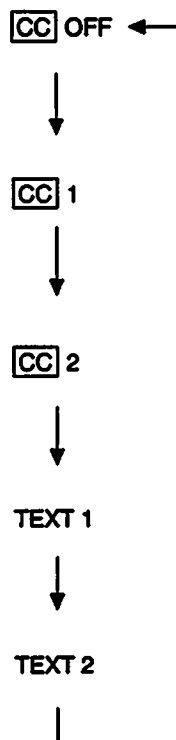
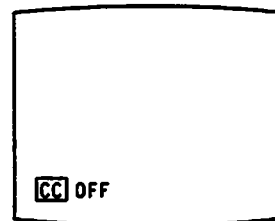
Press POWER.

Using Closed Caption

- 1 Press C.CAPTION.
The closed caption mode appears. CC1, CC2, TEXT1, TEXT2 or CC OFF appears in sequence each time you press C.CAPTION.



C.CAPTION



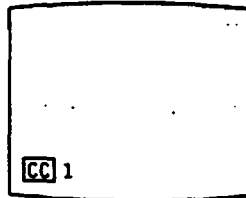
2 Press C.CAPTION repeatedly.

C.CAPTION



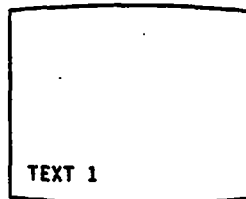
Select CC1 or CC2 to view Captions.

A Caption is a printed version of the dialogue or sound effects of a program. (The mode should be set to CC1 for most programs.)

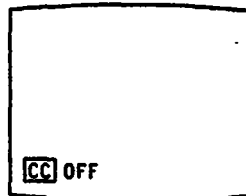


Select TEXT1 or TEXT2 to view Text.

Text is information that is presented using the half to full television screen. It is usually not related to the program.



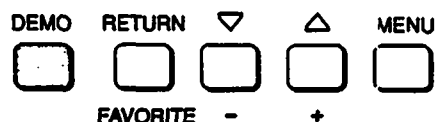
Select CC OFF if you don't want to view Closed Caption nor Text.



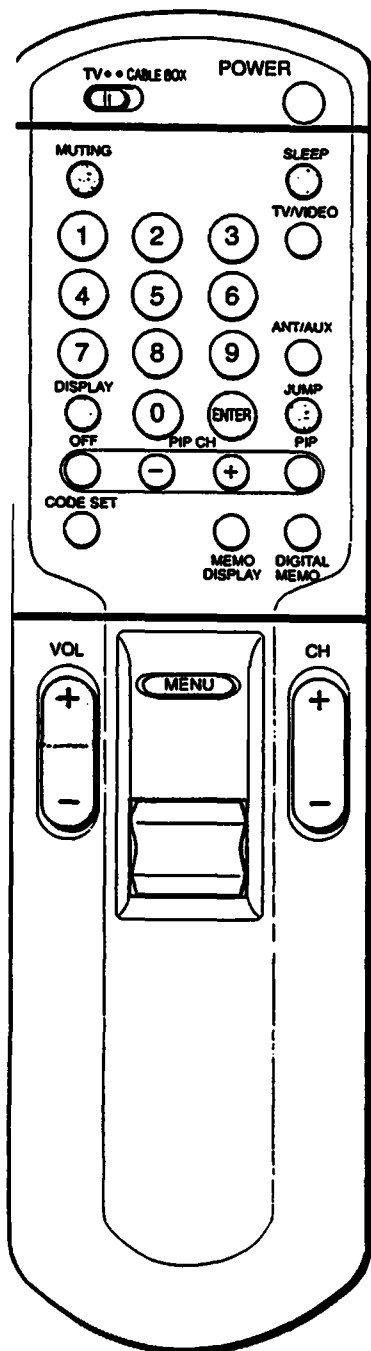
Note

The closed caption system checks for errors before captions or text appear. If an error is found, the mistake does not appear; a white box appears instead. In most cases, this allows you to read the caption without difficulty. Of course, not all errors can be found, and in some cases mistakes may appear. Poor reception of any TV station can cause poor reception of the closed caption signal causing errors or missing captions.

Using Convenient Features



Front inner panel



Outer panel

Muting the sound — MUTING

Press **MUTING**.
"MUTING" appears on the screen.

To restore the sound
 Press **MUTING** again, or press **VOL +**.

MUTING



Keeping the displays on-screen — DISPLAY

Press **DISPLAY**.
All the existing displays appear: channel number, channel caption (if set), MTS mode ("SAP" only), window picture input mode, and the current time ("AM" or "PM" disappears after about three seconds).

To turn off the displays
 Press **DISPLAY** again.

DISPLAY

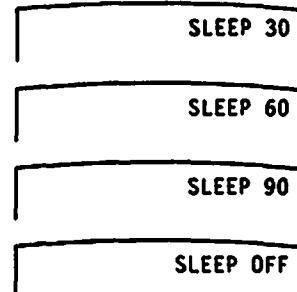


Setting the sleep timer — SLEEP

The sleep timer turns off the projection TV automatically after the amount of time you select.

Press **SLEEP**.
*Each time you press **SLEEP**, the time increments "30," "60," "90" and "OFF" mode appear in sequence.*

SLEEP



A red "SLEEP" display appears about one minute before the projection TV goes off.

To cancel the setting.
 Press **SLEEP** until **OFF** mode appears.
A green "SLEEP OFF" display appears for about three seconds.

OR

Turn the projection TV off.
The sleep timer setting is cancelled.

Switching quickly between two channels — JUMP

Use this function to keep track of two programs alternately.

To recall the channel you were watching previously
Press JUMP.

JUMP



To switch back to the first channel
Press JUMP again.

Note

The JUMP function also changes the mode to ANT (antenna) or AUX (auxiliary), depending on the mode of the channel you were watching previously.

Previewing the features — DEMO

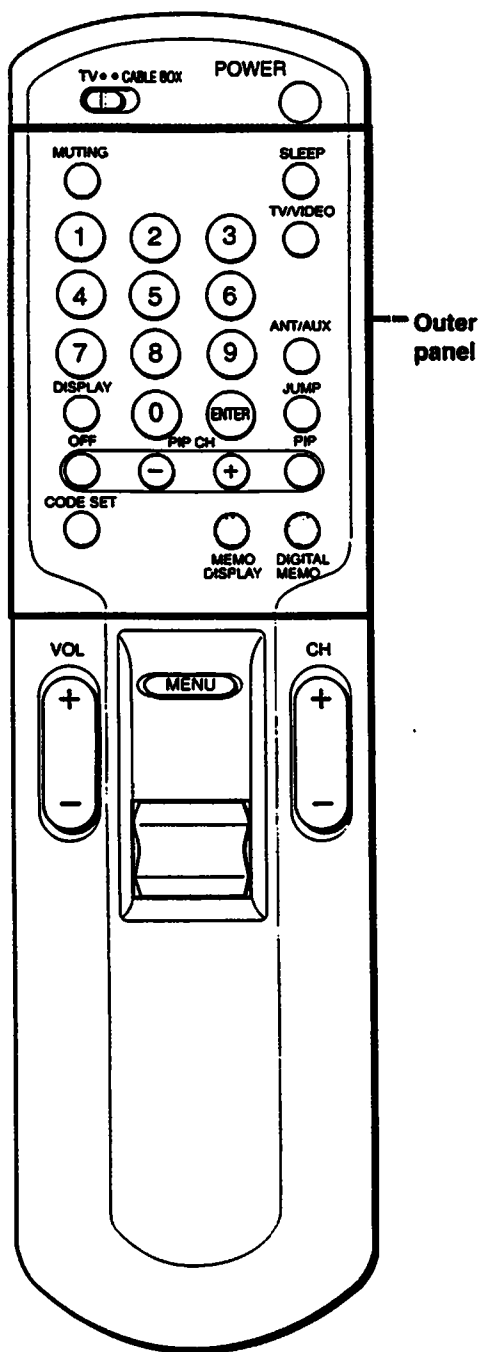
Press DEMO (front inner panel).
Functions and menus are displayed one by one.

DEMO



To restart DEMO from the beginning
Press DEMO again.

To stop DEMO
Press any button.



Storing an image in memory – DIGITAL MEMO

Use this feature to store and recall a recipe from a cooking program, a displayed address or phone number and so on.

- 1** Press DIGITAL MEMO.
The displayed image is stored in memory, and the image remains still on the screen.

DIGITAL
MEMO



- 2** Press MEMO DISPLAY.
The projection TV returns to normal viewing mode.

MEMO
DISPLAY



To recall the stored image

Press MEMO DISPLAY.

MEMO
DISPLAY



The stored picture is retained in memory until:

- you turn off the projection TV.
- you press OFF (in the PIP section) twice.
- you store a different image.

To return to the normal screen

Press MEMO DISPLAY again.

Note

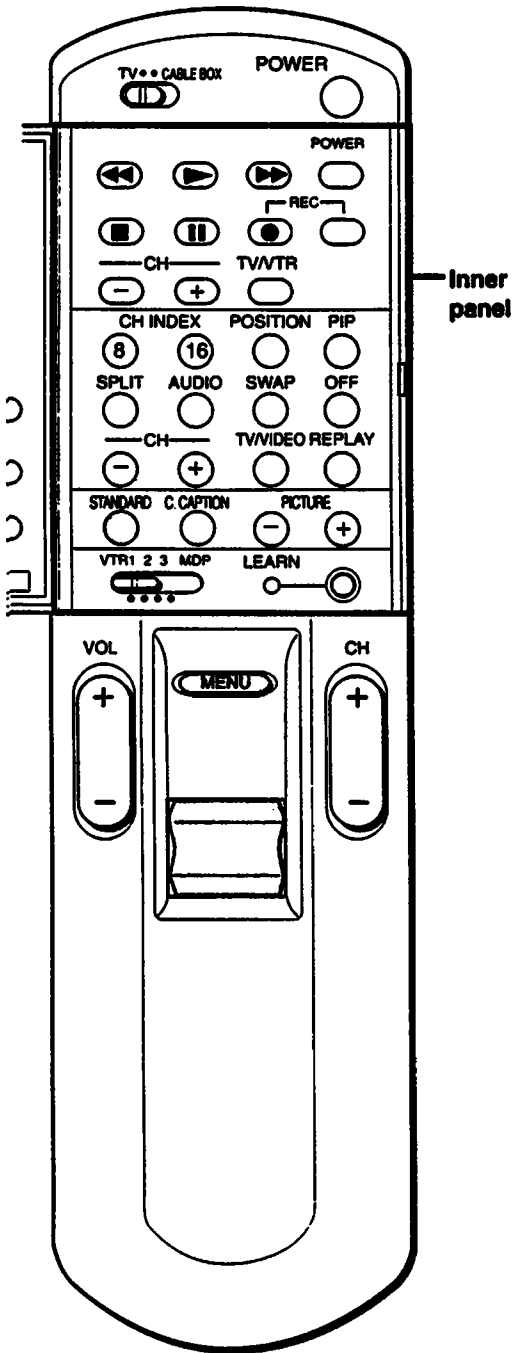
You cannot display a window picture (pp. 45 – 49) while viewing a DIGITAL MEMO screen.

Selecting a Picture and Sound Mode

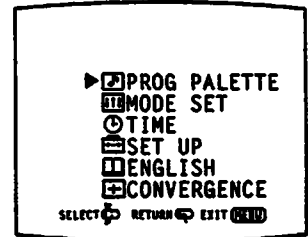


This projection TV features six modes (STANDARD, MOVIE, SPORTS, NEWS, MUSIC, GAME) that offer different picture and sound qualities. Choose the one that best suits the type of program that you want to watch.

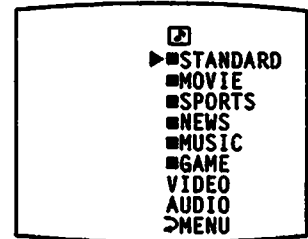
Example: Select MOVIE mode for picture and sound that gives you the sense of being in a movie theater.



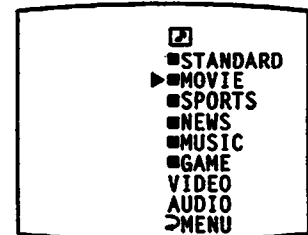
- 1 Press MENU.
The main menu appears, and the cursor points to "PROG PALETTE."



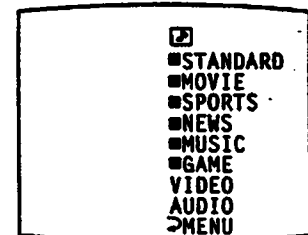
- 2 Click the rocker control.
The program palette menu appears.



- 3 Press the rocker control up or down until the cursor points to "MOVIE."



- 4 Click the rocker control.
The "MOVIE" display turns green, indicating that MOVIE mode is selected.



To select a different mode
Repeat steps 3 – 4.

Selecting a Picture and Sound Mode

Selecting standard mode (without using the menus)

Follow these instructions to select standard mode without using the on-screen menus.

Press STANDARD.

STANDARD



To return to the previous menu
Press the rocker control up or down until the cursor points to "➤ MENU."
Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen.
Press MENU on the Remote Commander.

When you select STANDARD mode

You receive standard picture and sound quality. Any video or audio adjustments you made ("Adjusting the Picture" pp. 50 – 54; "Adjusting the Sound" pp. 55 – 60) are cancelled and the original factory settings are restored.

When you select MOVIE mode

You receive a finely detailed picture, and a theatrical audio effect.
To further adjust picture and sound qualities, follow the instructions on pp. 50 – 54 and pp. 55 – 60, or select different sound modes from the DSP (Digital Sound Processor) menu (pp. 55 – 56).

When you select SPORTS mode

You receive a vivid, bright picture, and sound with a sports stadium effect.
To further adjust picture and sound qualities, follow the instructions on pp. 50 – 54 and pp. 55 – 60, or select different sound modes from the DSP (Digital Sound Processor) menu (pp. 55 – 56).

When you select NEWS mode

Picture noise is reduced, and you receive clear voice reproduction.
To further adjust picture and sound qualities, follow the instructions on pp. 50 – 54 and pp. 55 – 60, or select different sound modes from the DSP (Digital Sound Processor) menu (pp. 55 – 56).

When you select MUSIC mode

You receive a warmer picture, and live concert effect sound.
To further adjust picture and sound qualities, follow the instructions on pp. 50 – 54 and pp. 55 – 60, or select different sound modes from the DSP (Digital Sound Processor) menu (pp. 55 – 56).

When you select GAME mode

The picture is easier on your eyes, and sound has a surround effect.
To further adjust picture and sound qualities, follow the instructions on pp. 50 – 54 and pp. 55 – 60, or select different sound modes from the DSP (Digital Sound Processor) menu (pp. 55 – 56).

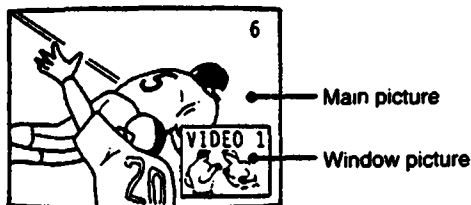
Caution

Leaving a fixed pattern on the screen for long periods of time, when operating a video game or personal computer, may damage the picture tube. To avoid this, keep the picture contrast and the brightness levels low (PICTURE and BRIGHT adjustment, pp. 50 – 51).

Chapter 3: Using Advanced Features

Watching Two or More Pictures at Once (PIP)

You can watch both the main picture and one or more window pictures simultaneously, using the Picture-in-Picture (PIP) function.



Picture-in-Picture special features

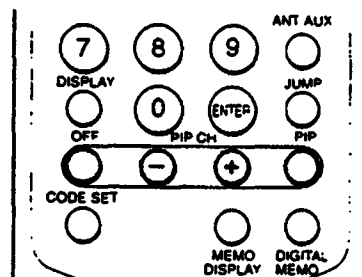
When watching the main picture and a window picture, you can:

- Choose the sound from the main or window picture (AUDIO).
- Change the position of the window picture (POSITION).
- Swap the main and window pictures (SWAP).
- Replay the main picture as a window picture (REPLAY).
- Split the screen, with the main picture on one side and the window picture on the other side (SPLIT).
- Display 8 or 16 TV channels simultaneously (CH INDEX 8/16).

Displaying a window picture

To turn PIP mode on or off, or to change TV channels, you can use the PIP buttons on the Remote Commander's outer panel. For other PIP functions, use the inner panel controls, which also include the PIP, OFF and CH +/- buttons.

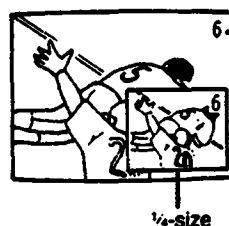
Remote Commander (Outer panel)



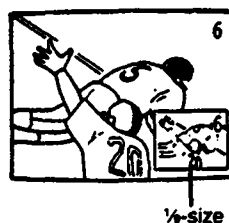
Press PIP to display a window picture



Input source mode or TV channel for the main picture



Input source mode or TV channel for the window picture



Notes

- You can also use the CH +/- buttons on the Remote Commander's inner panel.
- The video label and channel caption will not appear with the window picture even if you have set them.
- If you select a blocked channel in the window picture, the display "BLOCKED" appears with the window picture. (See "Setting CHANNEL BLOCK," pp. 70 - 71.)
- If you display a DIGITAL MEMO screen (p. 42), the window picture disappears.

A window picture appears in the last mode you watched. Each time you press PIP, a 1/4 or 1/9 size window picture appears alternately.

To turn PIP function off

Press OFF.

The window picture disappears.

To change TV channels in the window picture

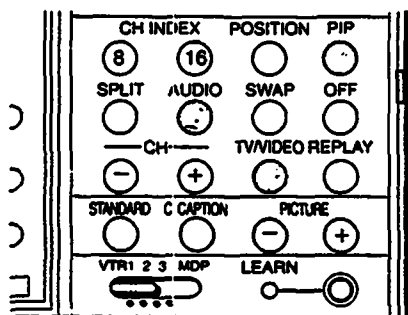
Press TV/VIDEO to select TV mode; then press CH +/- in the PIP control area.

Watching Two Pictures at Once (PIP)

Changing the window picture input mode

Follow these instructions to select the input mode (TV/ VIDEO 1, VIDEO 2, VIDEO 3) for the window picture.

Remote Commander (inner panel)




- Press PIP to display a window picture.**



- 2** Press TV/VIDEO to select the input mode. Each time you press TV/VIDEO, "TV," "VIDEO 1," "VIDEO 2" and "VIDEO 3" appear in sequence.



**To receive the window picture sound
Press AUDIO.**

The  display appears for a few seconds, indicating that the window picture sound is being received.

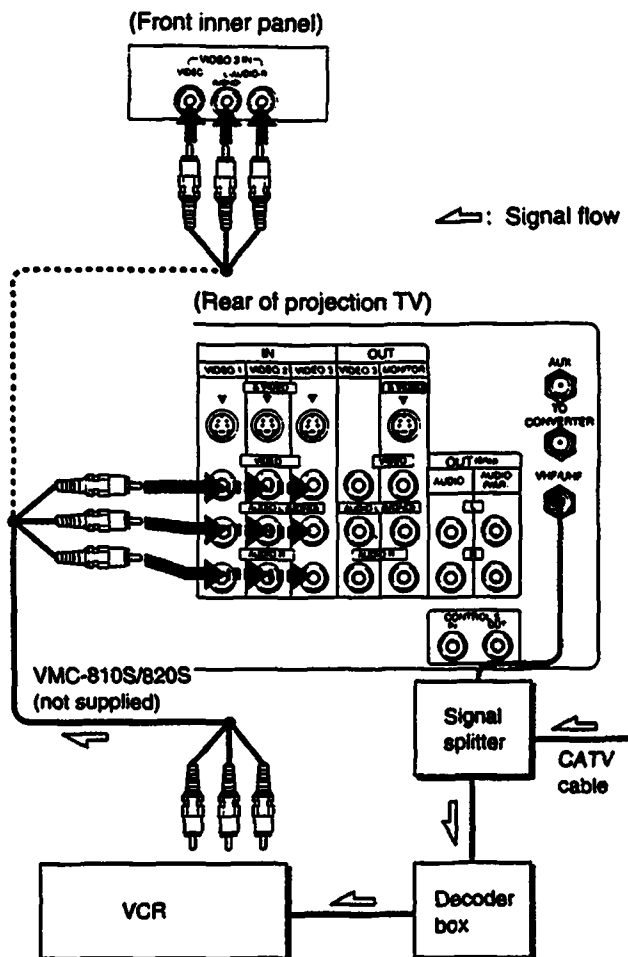
**To restore the main picture sound
Press AUDIO again.**

Note

The window picture sound is also output from the AUDIO (VAR) OUT jacks. The AUDIO OUT and MONITOR OUT jacks output the main picture sound only.

Displaying CATV input as a window picture

To use Picture-in-Picture with pay cable TV input, make the connections to your cable converter box as shown below.



After making the above connections, turn the cable connection on by following the steps on pp. 28 – 29; then continue with the steps below.

- 1-2** Follow steps 1 – 2 in “Changing the window picture input mode” on this page to select the video input mode for your connected VCR.

- 3** Put your VCR on an inactive channel (channel 3 or 4).

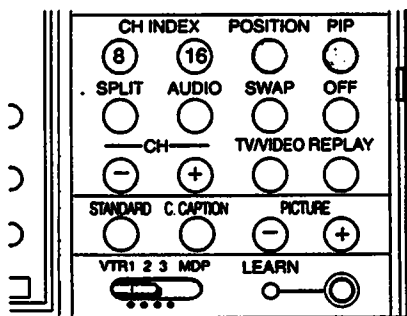
- #### 4 Change pay cable TV channels with the decoder box.

To control your cable converter box with the supplied Remote Commander
See p. 78.

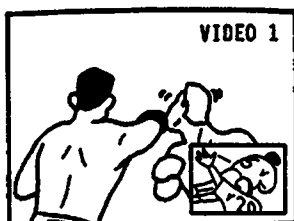
Changing the position of the window picture

Follow these instructions to change the position of the window picture on the screen.

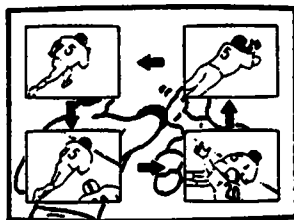
Remote Commander (Inner panel)



- 1 Press PIP to display a window picture.



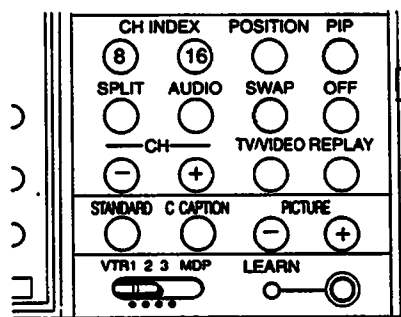
- 2 Press POSITION.
Each time you press POSITION, the window picture moves as illustrated.



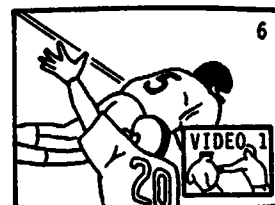
Swapping the main and window pictures

Follow these instructions to swap the input signals of the main and window pictures.

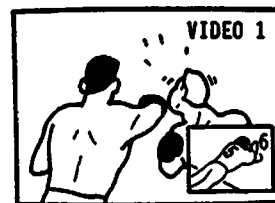
Remote Commander (Inner panel)



- 1 Press PIP to display a window picture.



- 2 Press SWAP.
Each time you press SWAP, the images from the main and window pictures switch places.

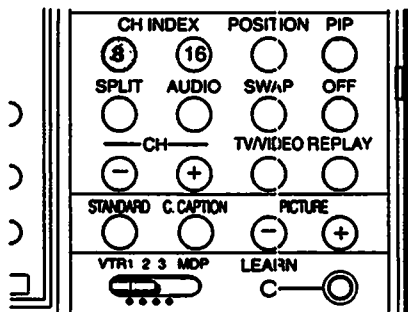


Watching Two or More Pictures at Once (PIP)

Displaying 8 TV channels at once – CH INDEX 8

Follow these instructions to display the main picture and 7 window pictures at once.

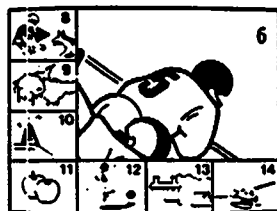
Remote Commander (Inner panel)



- 1 Press PIP to display a window picture.



- 2 Press CH INDEX 8 to display seven window pictures. Seven TV channels appear in numerical sequence, as window pictures.



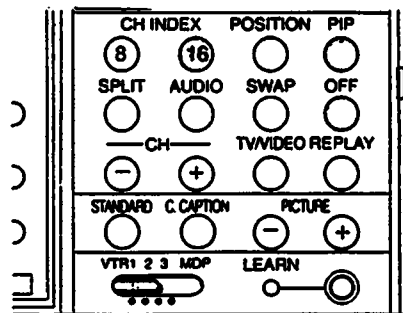
Each time you press CH INDEX 8, the next seven sequential channels appear (the main picture does not change).

To return to the normal screen
Press OFF.

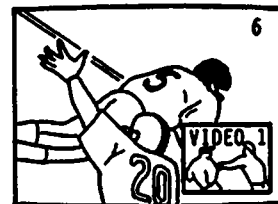
Displaying 16 TV channels at once – CH INDEX 16

Follow these instructions to display 16 window pictures at once.

Remote Commander (Inner panel)

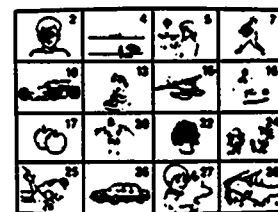


- 1 Press PIP to display a window picture.



- 2 Press CH INDEX 16 to display 16 window pictures. 16 TV channels appear in numerical sequence, as window pictures.

CH INDEX



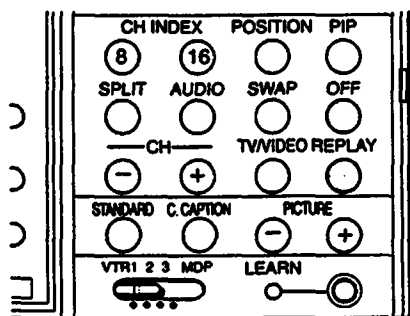
Each time you press CH INDEX 16, the next 16 sequential channels appear (the main picture does not change).

To return to the normal screen
Press OFF.

Replaying the main picture as a window picture

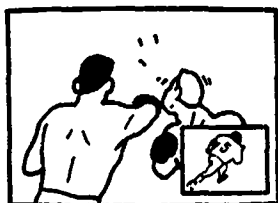
Follow these instructions to replay the image that appeared in the main picture two seconds before, as a window picture.

Remote Commander (Inner panel)



Press REPLAY.

REPLAY

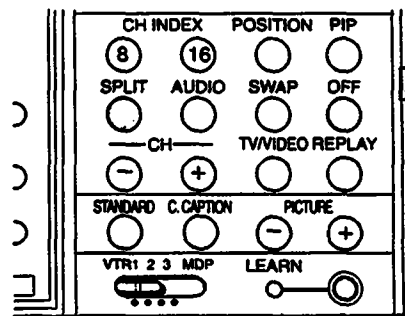


To return to the normal screen
Press OFF.

Splitting the screen

Follow these instructions to split the screen, with the window picture on the left, and the main picture on the right.

Remote Commander (Inner panel)



Press SPLIT.

SPLIT



Window picture Main picture

To return to the normal screen
Press OFF.

Note

When using SPLIT, vertical lines may appear elongated.

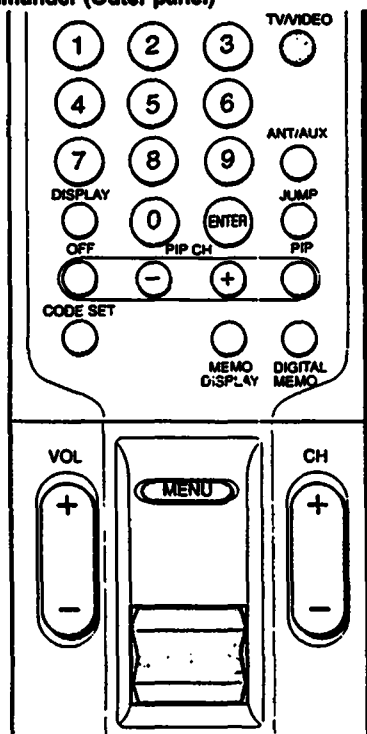
Adjusting the Picture

You can adjust the picture (and sound, pp. 57 – 58) for each input mode (TV, VIDEO 1, VIDEO 2, VIDEO 3) by pressing TV/VIDEO on the projection TV or on the Remote Commander to select the input mode, before making the adjustments. These adjustments are retained in memory even when you turn off the projection TV, but are cancelled after you change the adjustments, or select a picture and sound mode (pp. 43 – 44).

Adjusting picture quality

Follow these instructions to adjust PICTURE, HUE, COLOR, BRIGHT (brightness) and SHARP (sharpness).

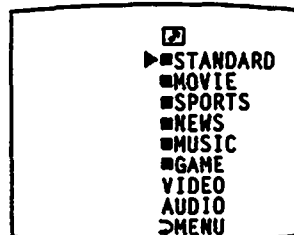
Remote Commander (Outer panel)



- 1** Press MENU.
The main menu appears, and the cursor points to "PROG PALETTE."

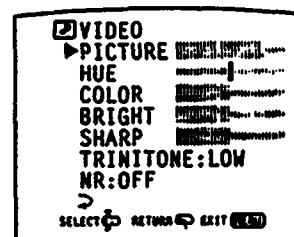


- 2** Click the rocker control.
The program palette menu appears.



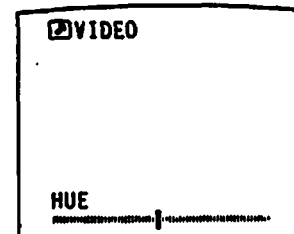
- 3** Press the rocker control up or down until the cursor points to "VIDEO."

- 4** Click the rocker control.
The VIDEO screen appears.



- 5** Press the rocker control up or down until the cursor points to the item you want to adjust.

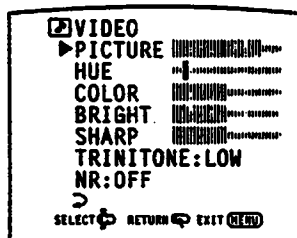
- 6** Click the rocker control.
The adjustment screen appears.



7 Press the rocker control up or down to make the adjustment.

Picture quality	Press the rocker control down	Press the rocker control up
PICTURE	For decreased picture contrast with soft color	For increased picture contrast with vivid color
HUE	Skin tones become purplish	Skin tones become greenish
COLOR	For less color intensity	For more color intensity
BRIGHT	For less brightness	For more brightness
SHARP	For less sharpness	For more sharpness

8 Click the rocker control.
The adjustment is complete, and the VIDEO screen automatically reappears.



To adjust other items

Repeat steps 5 – 8.

To restore the factory settings for all the items

Select "STANDARD" on the program palette menu, and click the rocker control;

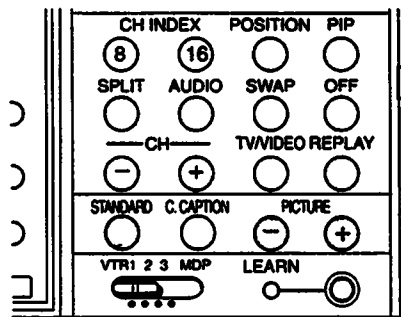
or, press STANDARD on the Remote Commander.

All the items, including TRINITONE (p. 52) and NR (p. 53) return to their original factory settings.

To adjust picture contrast

You can also adjust picture contrast with the PICTURE +/- buttons on the Remote Commander.

(Inner panel)



Press + to increase picture contrast with vivid color.

Press – to decrease picture contrast with soft color.

The picture adjustment screen appears.

To return to the previous menu

Press the rocker control up or down until the cursor points to "➤ MENU."

Then click the rocker control.

To return to the main menu

Repeat the above, until you reach the main menu.

To return to the normal screen

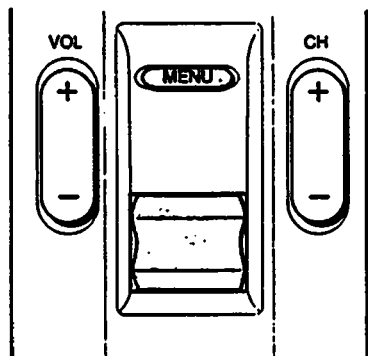
Press MENU on the Remote Commander.

Adjusting the Picture

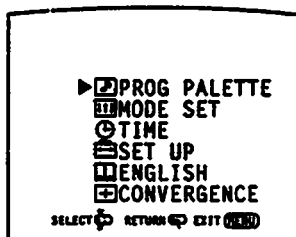
Setting the TRINITONE mode

Color picture tubes are usually manufactured with a fixed color temperature (tint) that determines the "warmth" (red tint) or "coolness" (blue tint) of the picture. Use the Sony Trinitone feature to adjust the picture color to your preference.

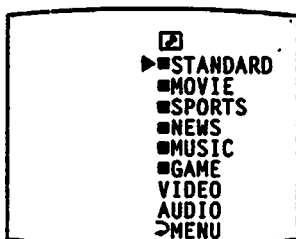
Remote Commander



- 1 Press MENU.
The main menu appears, and the cursor points to "PROG PALETTE."

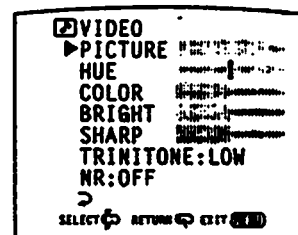


- 2 Click the rocker control.
The program palette menu appears.



- 3 Press the rocker control up or down until the cursor points to "VIDEO."

- 4 Click the rocker control.
The VIDEO screen appears.



- 5 Press the rocker control up or down until the cursor points to "TRINITONE."

- 6 Click the rocker control.
The mode display turns red.

- 7 Press the rocker control up or down to select "HIGH" or "LOW."

Select "HIGH" to make the picture cool (bluish).
Select "LOW" to make the picture warm (reddish).

- 8 Click the rocker control.
The setting is complete.

To return to the previous menu

Press the rocker control up or down until the cursor points to "MENU."

Then click the rocker control.

To return to the main menu

Repeat the above, until you reach the main menu.

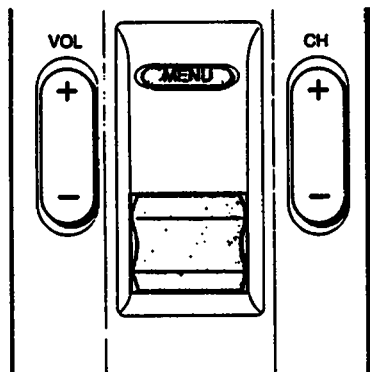
To return to the normal screen

Press MENU on the Remote Commander.

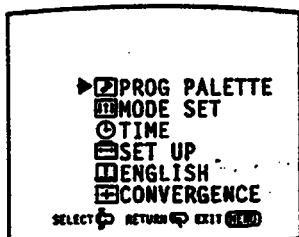
Setting NR (picture noise reduction) ON or OFF

Follow these instructions to reduce picture noise.

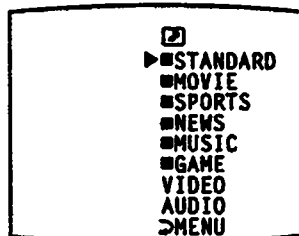
Remote Commander



- 1** Press MENU.
The main menu appears, and the cursor points to "PROG PALETTE."

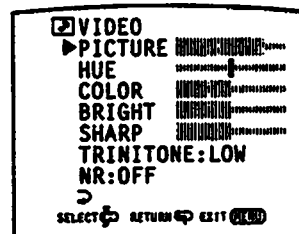


- 2** Click the rocker control.
The program palette menu appears.

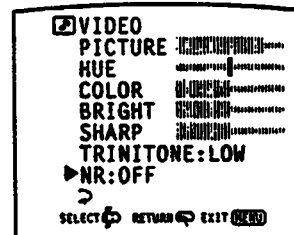


- 3** Press the rocker control up or down until the cursor points to "VIDEO."

- 4** Click the rocker control.
The VIDEO screen appears.



- 5** Press the rocker control up or down until the cursor points to "NR."



- 6** Click the rocker control.
The mode display turns red.

- 7** Press the rocker control up or down to select "ON" or "OFF."

Select "ON" to reduce picture noise.
Select "OFF" to restore the normal picture.

- 8** Click the rocker control.
The setting is complete.

To return to the previous menu

Press the rocker control up or down until the cursor points to "➤ MENU."

Then click the rocker control.

To return to the main menu

Repeat the above, until you reach the main menu.

To return to the normal screen

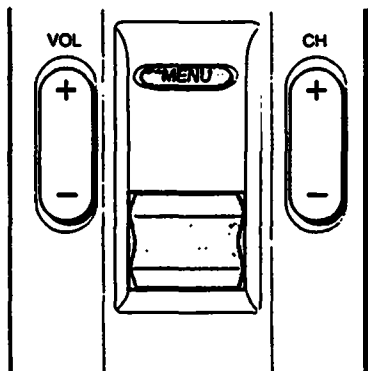
Press MENU on the Remote Commander.

Adjusting the Picture

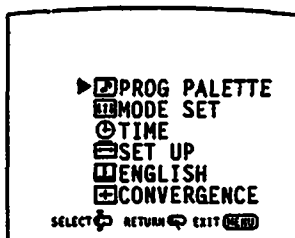
Setting S-VIDEO ON or OFF

Follow these instructions to set S-VIDEO on or off, depending on the kind of video equipment you have connected to the projection TV. For instructions on connecting video equipment, see pp. 15 – 18.

Remote Commander (Outer panel)

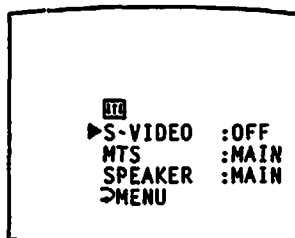


- 1 Press MENU.
The main menu appears.



- 2 Press the rocker control up or down until the cursor points to "MODE SET."

- 3 Click the rocker control.
The mode set menu appears, with the cursor pointing to "S-VIDEO."



- 4 Click the rocker control.
The mode display turns red.

- 5 Press the rocker control up or down to select "ON" or "OFF."

- 6 Click the rocker control.
The setting is complete.

To return to the previous menu
Press the rocker control up or down until the cursor points to "▶ MENU."
Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

Adjusting the Sound

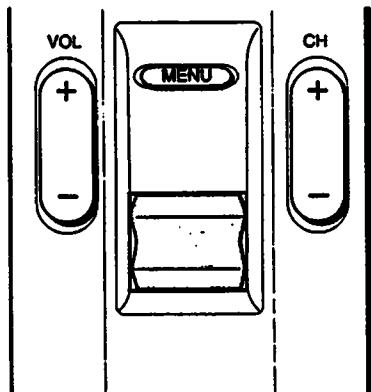


Selecting a sound mode

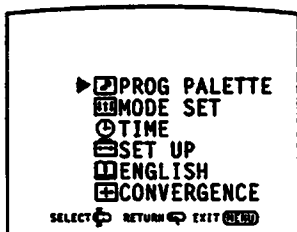
Use the DSP (Digital Sound Processor) menu to select the sound mode that best suits the type of sound you are listening to.

Example: Select JAZZ CLUB mode to enhance the effect when viewing a musical performance.

Remote Commander

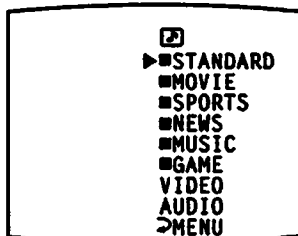


- 1** Press MENU.
The main menu appears.



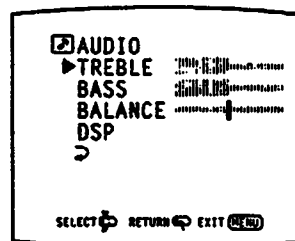
- 2** Press the rocker control up or down until the cursor points to "PROG PALETTE."

- 3** Click the rocker control.
The program palette menu appears.



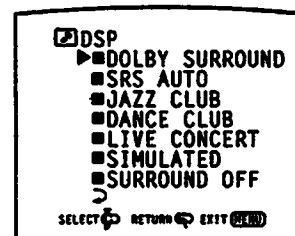
- 4** Press the rocker control up or down until the cursor points to "AUDIO."

- 5** Click the rocker control.
The AUDIO screen appears.



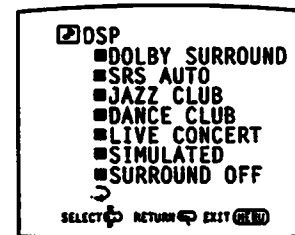
- 6** Press the rocker control up or down until the cursor points to "DSP."

- 7** Click the rocker control.
The DSP menu appears.



- 8** Press the rocker control up or down until the cursor points to "JAZZ CLUB."

- 9** Click the rocker control.
JAZZ CLUB mode is selected.



To select a different mode

Repeat steps 8 – 9. (See the next page for the different modes you can choose.)

To further adjust the sound

Follow the instructions on pp. 57 – 58.

To return to the previous menu

Press A/V WINDOW +/- until the cursor points to "> MENU."

Then press RETURN.

To return to the main menu

Repeat the above, until you reach the main menu.

To return to the normal screen.

Press MENU on the Remote Commander.

Adjusting the Sound

When you select DOLBY SURROUND* mode

You receive wraparound sound with three-dimensional audio depth and presence when you connect main speakers and optional rear speakers.

Note

You must set REAR SPEAKER to "YES" (p. 60), or the display is blacked out and cannot be selected.

When using rear speakers, control the volume with the REAR VOLUME adjustment screen.

When you select SRS AUTO mode

You receive powerfully realistic sound that recaptures audio "clues" originally present but masked in the recording process, so that the action seems to happen all around you.

When you select JAZZ CLUB mode

You receive sound that gives a sense of space, with a touch of echo added.

When you select DANCE CLUB mode

You receive the sound effect of the hard floor and wall environment of a dance club.

When you select LIVE CONCERT mode

You receive sound that simulates the effect of being present at a live concert.

When you select SIMULATED mode


You receive monaural sound with a surround-like effect.

When you select SURROUND OFF mode

You receive sound without a surround effect.

To further adjust sound qualities

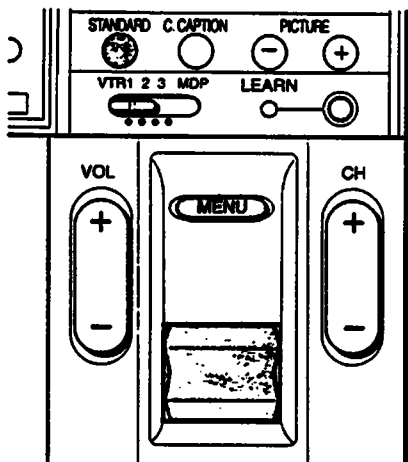
Follow the instructions on pp. 57 – 58.

* Manufactured under license from Dolby Laboratories Licensing Corporation. Additionally licensed under one or more of the following patents: U.S. numbers 3,632,886, 3,746,792 and 3,959,590. "Dolby" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

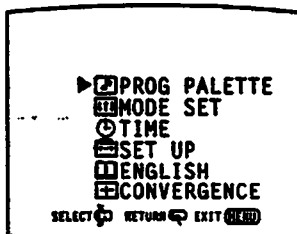
Adjusting sound quality

Follow these instructions to adjust the TREBLE, BASS and BALANCE.

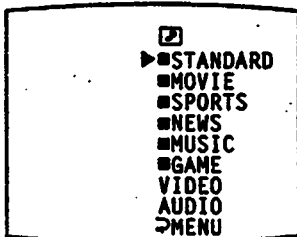
Remote Commander (Inner panel)



- 1** Press MENU.
The main menu appears, and the cursor points to "PROG PALETTE."

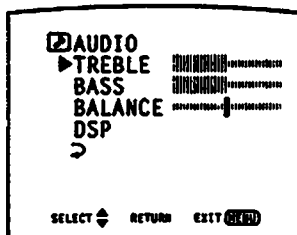


- 2** Click the rocker control.
The program palette menu appears.



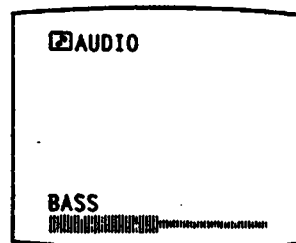
- 3** Press the rocker control up or down until the cursor points to "AUDIO."

- 4** Click the rocker control.
The AUDIO screen appears.



- 5** Press the rocker control up or down until the cursor points to the item you want to adjust.

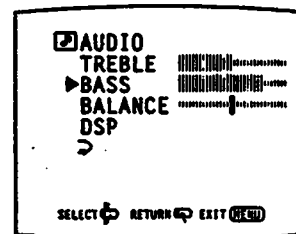
- 6** Click the rocker control.
The adjustment screen appears.



- 7** Press the rocker control up or down to make the adjustment.

Sound quality	Press the rocker control down	Press the rocker control up
TREBLE	To decrease the treble response	To increase the treble response
BASS	To decrease the bass response	To increase the bass response
BALANCE	To emphasize the left speaker's volume	To emphasize the right speaker's volume

- 8** Click the rocker control.
The adjustment is complete, and the AUDIO screen automatically reappears.



To adjust other items
Repeat steps 5 – 9.

To restore the factory settings for all the items
Select "STANDARD" on the program palette menu, and click the rocker control; or, press STANDARD on the Remote Commander.
All the items return to their original factory settings.

To return to the previous menu
Press the rocker control up or down until the cursor points to "> MENU." Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

Selecting an MTS (Multichannel TV Sound) mode

Follow these instructions to select an MTS mode.

Select MAIN mode to listen to stereo sound.

The **STEREO** lamp on the projection TV lights up whenever a stereo broadcast is received.

Select SAP mode to listen to Second Audio Programs.

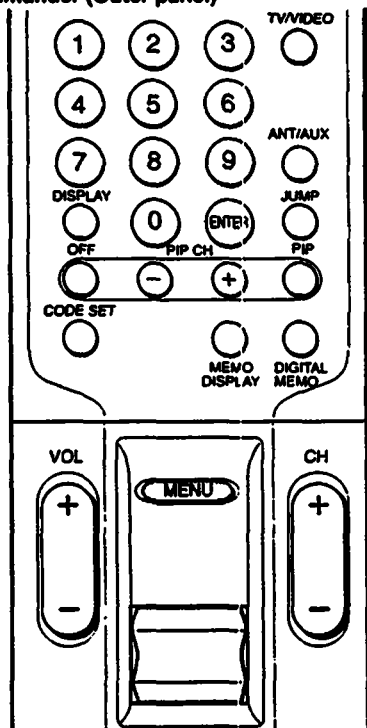
Select MONO mode to eliminate excessive noise during stereo broadcasts, caused by a weak incoming signal.

Note

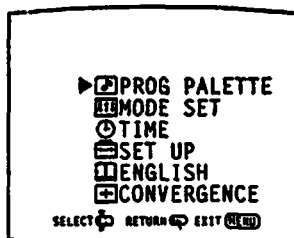
If the projection TV is in video mode, the "MTS" display is shaded and cannot be selected.

Press TV/VIDEO on the projection TV or on the Remote Commander to change to TV mode.

Remote Commander (Outer panel)

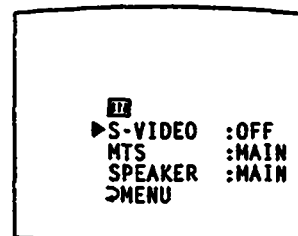


- 1** Press MENU.
The main menu appears.



- 2** Press the rocker control up or down until the cursor points to "MODE SET."

- 3** Click the rocker control.
The mode set menu appears.



- 4** Press the rocker control up or down until the cursor points to "MTS."

- 5** Click the rocker control.
The mode display turns red.

- 6** Press the rocker control up or down to select the mode you want.
Each time you press the rocker control up or down, "MAIN," "SAP" and "MONO" appear in sequence.

- 7** Click the rocker control.
The mode is selected.

To return to the previous menu

Press the rocker control up or down until the cursor points to "➤ MENU." Then click the rocker control.

To return to the main menu

Repeat the above, until you reach the main menu.

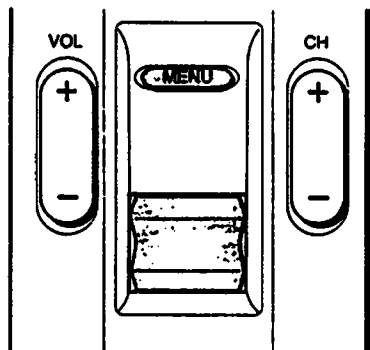
To return to the normal screen

Press MENU on the Remote Commander.

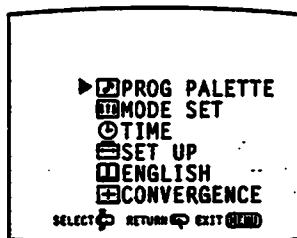
Setting SPEAKER — MAIN or CENTER

Follow these instructions to set SPEAKER to "CENTER" when you connect an audio system (p.19), and to "MAIN" when you want to listen to the sound from the projection TV speakers.

Remote Commander

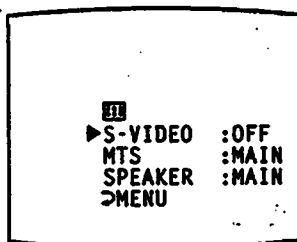


- 1** Press MENU.
The main menu appears.



- 2** Press the rocker control up or down until the cursor points to "MODE SET."

- 3** Click the rocker control.
The mode set menu appears.



- 4** Press the rocker control up or down until the cursor points to "MAIN SPEAKER."

- 5** Click the rocker control.
The mode display turns red.

- 6** Press the rocker control up or down to select "MAIN" or "CENTER."

- 7** Click the rocker control.
The setting is complete.

To return to the previous menu

Press the rocker control up or down until the cursor points to "▶ MENU."

Then click the rocker control.

To return to the main menu

Repeat the above, until you reach the main menu.

To return to the normal screen

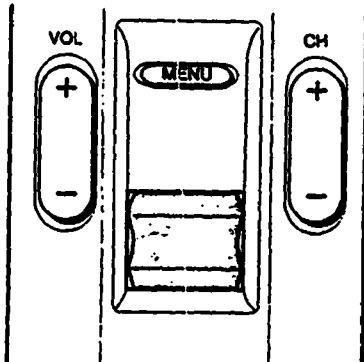
Press MENU on the Remote Commander.

Adjusting the Sound

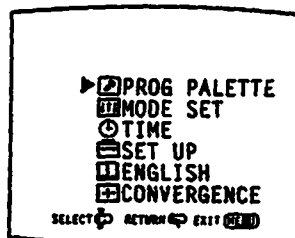
Setting REAR SPEAKER

Set REAR SPEAKER to "YES" to use optional speakers as rear speakers (p. 21).

Remote Commander

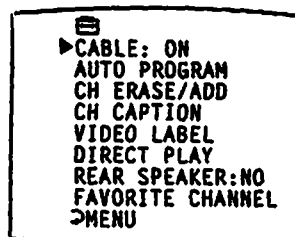


- 1** Press MENU.
The main menu appears.



- 2** Press the rocker control up or down until the cursor points to "SET UP."

- 3** Click the rocker control.
The set up menu appears.



- 4** Press the rocker control up or down until the cursor points to "REAR SPEAKER."

- 5** Click the rocker control.
The mode display turns red.

- 6** Press the rocker control up or down to select "YES."

- 7** Click the rocker control.
The REAR SPEAKER screen appears.



- 8** Press the rocker control up or down until the cursor points to the item you want to adjust.

- 9** Click the rocker control.
The adjustment screen appears.



- 10** Use the rocker control to make the adjustment.

REAR VOLUME

Press the rocker control down to decrease the rear speaker volume.
Press the rocker control up to increase the rear speaker volume.

INPUT BALANCE

Press the rocker control down to improve the input balance.
(Set to the lowest point for best input balance.)

Notes

- Setting REAR SPEAKER to "NO" does not turn off the rear speaker sound. Control the rear speaker volume with the REAR VOLUME adjustment.
- While the INPUT BALANCE adjustment screen is displayed, the sound from the front speakers is cut off.

- 11** Click the rocker control.
The setting is complete.

To set REAR SPEAKER to "NO"
Repeat steps 1 – 11, and select "NO" in step 6.

To return to the previous menu
Press the rocker control up or down until the cursor points to " > MENU." Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

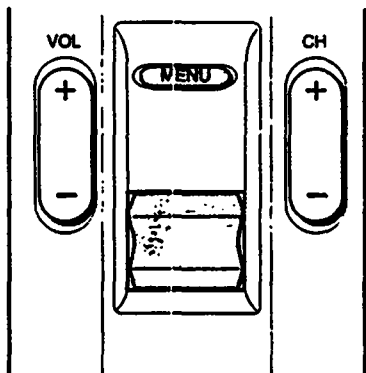
To return to the normal screen
Press MENU on the Remote Commander.

Adjusting the Sound Customizing the Screen Display

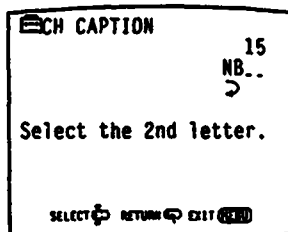
Setting channel captions – CH CAPTION

(Cont'd. from prev. page)

Remote Commander

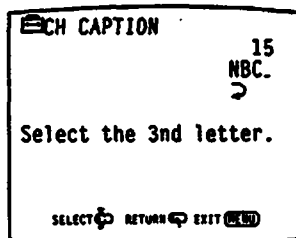


10 Press the rocker control up or down to select "B."



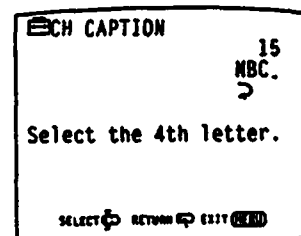
11 Click the rocker control.
The third caption space turns red.

12 Press the rocker control up or down to select "C."



13 Click the rocker control.
The fourth caption space turns red.

14 Press the rocker control up or down to select a blank space.



15 Click the rocker control.
The setting is complete.
When you select or display the channel number, the channel caption also appears.

To caption more channels
Repeat steps 6 – 15.

To erase unnecessary captions
Display the CH CAPTION screen, select the channel with the caption you want to erase, and select blank spaces for the channel caption; then click the rocker control.
The caption for that channel is erased.

To return to the previous menu
Press the rocker control up or down until the cursor points to "➤ MENU."
Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

Note
You can set up to 32 channel captions. If the memory is full, "The memory is full, sorry" appears on the screen. Erase any unnecessary captions, and begin again.

Setting VIDEO LABEL

Follow these instructions to label each input mode, in order to identify the equipment connected to each input terminal.

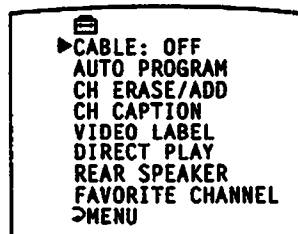
Example: Label VIDEO 1 IN as "VHS."

- 1 Press MENU.
The main menu appears.



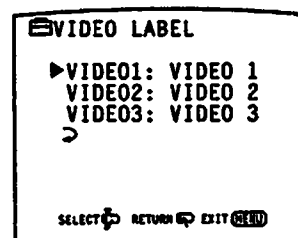
- 2 Press the rocker control up or down until the cursor points to "SET UP."

- 3 Click the rocker control.
The set up menu appears.



- 4 Press the rocker control up or down until the cursor points to "VIDEO LABEL."

- 5 Click the rocker control.
The VIDEO LABEL screen appears.



- 6 Press the rocker control up or down until the cursor points to the input mode you want to label. (In this case, the cursor is already pointing to "VIDEO 1.")

- 7 Click the rocker control.
The label display turns red.

- 8 Press the rocker control up or down to select "VHS."



Each time you press the rocker control up or down, the label changes:

VIDEO 1 → BETA → 8mm → VHS → LD → S-VIDEO

- 9 Click the rocker control.
*The setting is complete.
When you select or display the video mode, the video label appears.*

To label other input modes
Repeat steps 6 – 9.

To change a label
Same as above.

To return to the previous menu
Press the rocker control up or down until the cursor points to "> MENU." Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen
Press MENU on the Remote Commander.

Using Timer-Activated Functions

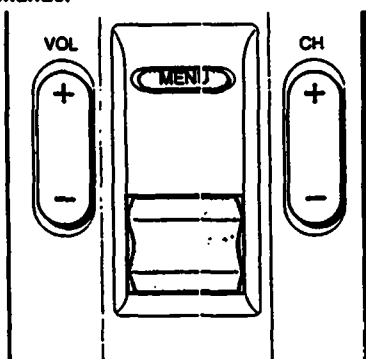
Setting DAYLIGHT SAVING

If you live in an area that uses daylight savings time, set DAYLIGHT SAVING to "YES" or "NO" depending on the season, before setting the current time. At the next daylight savings date, you will be able to automatically adjust all the time-related settings (CURRENT TIME, ON/OFF TIMER and CHANNEL BLOCK) simply by changing the DAYLIGHT SAVING setting.

When setting DAYLIGHT SAVING:

- **After the first Sunday in April (spring daylight savings)**
Set to "YES" before setting the current time.
Then, on the last Sunday in October (fall daylight savings), set to "NO."
All the time-related settings automatically move one hour back.
- **After the last Sunday in October (fall daylight savings)**
Set to "NO" before setting the current time.
Then, on the first Sunday in April (spring daylight savings), set to "YES."
All the time-related settings automatically move one hour ahead.

Remote Commander



Follow these instructions to set DAYLIGHT SAVING to "YES" or "NO."

- 1 Press MENU.
The main menu appears.



- 2 Press the rocker control up or down until the cursor points to "TIME."

- 3 Click the rocker control.
The time menu appears.

Ⓒ
▶CURRENT TIME SET
ON/OFF TIMER
CHANNEL BLOCK
DAYLIGHT SAVING:NO
MENU

- 4 Press the rocker control up or down until the cursor points to "DAYLIGHT SAVING."

- 5 Click the rocker control.
The mode display turns red.

- 6 Press the rocker control up or down to select "YES" or "NO."
The setting is complete.

- 7 Click the rocker control.

To return to the previous menu

Press the rocker control up or down until the cursor points to " > MENU."
Then click the rocker control.

To return to the main menu

Repeat the above, until you reach the main menu.

To return to the normal screen.

Press MENU on the Remote Commander.

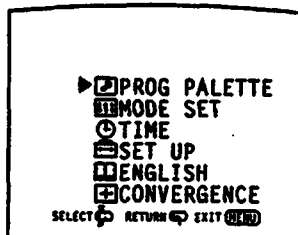


Setting the clock — CURRENT TIME SET

Follow these instructions to set the current time. The correct current time must be set in order to use the other time-related functions (DAYLIGHT SAVING, ON/OFF TIMER, CHANNEL BLOCK).

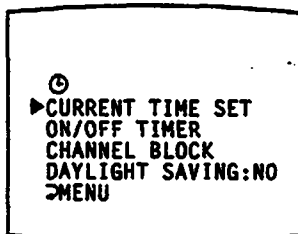
Example: Set the time to 3:15 PM, Monday.

- 1** Press MENU.
The main menu appears.

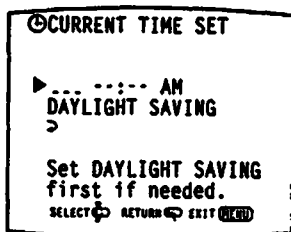


- 2** Press the rocker control up or down until the cursor points to "TIME."

- 3** Click the rocker control.
The time menu appears, and the cursor points to "CURRENT TIME SET."



- 4** Click the rocker control again.
The CURRENT TIME SET screen appears, with a reminder to set DAYLIGHT SAVING.



If you do not need to set DAYLIGHT SAVING, click the rocker control and continue from step 5.

To set daylight saving

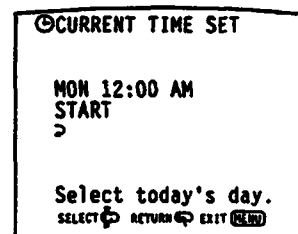
- a** Press the rocker control up or down until the cursor points to "DAYLIGHT SAVING."
- b** Click the rocker control.
The time menu appears, and the cursor points to "DAYLIGHT SAVING."
- c** Click the rocker control.
- d** Press the rocker control up or down to select "YES" or "NO."
- e** Click the rocker control.
The setting is complete.

To set the time

Press the rocker control up or down until the cursor points to "CURRENT TIME SET"; click the rocker control, then continue from step 5.

- 5** Click the rocker control.
The CURRENT TIME SET screen appears, and the "SUN" display appears (red).

- 6** Press the rocker control up or down to select "MON."
Each time you press the rocker control up or down, the day changes consecutively.

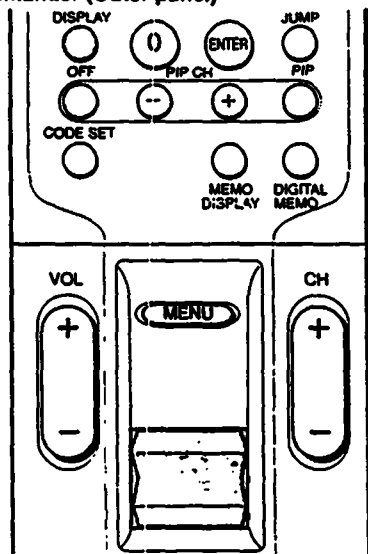


(Continued)

Setting the clock — CURRENT TIME SET

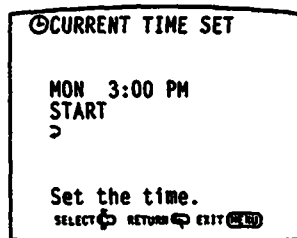
(Cont'd. from prev. page)

Remote Commander (Outer panel)



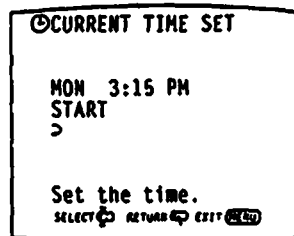
- 7** Click the rocker control.
The hour and am/pm displays turn red.

- 8** Press the rocker control up or down to set "3:00PM."
Each time you press the rocker control up or down, the hour changes in sequence beginning with "12:00AM."



- 9** Click the rocker control.
The minute display turns red.

- 10** Press the rocker control up or down to select "15" (minutes).
Each time you press the rocker control up or down, the minutes change in sequence.



- 11** Click the rocker control.
The cursor points to "START."

- 12** Check the actual time, and click the rocker control to start the clock.
The setting is complete.

To reset the time

Display the CURRENT TIME SET screen and repeat steps 5 – 12.

To display the current time

Press DISPLAY.

To return to the previous menu

Press the rocker control up or down until the cursor points to "➤ MENU."
Then click the rocker control.

To return to the main menu

Repeat the above, until you reach the main menu.

To return to the normal screen.

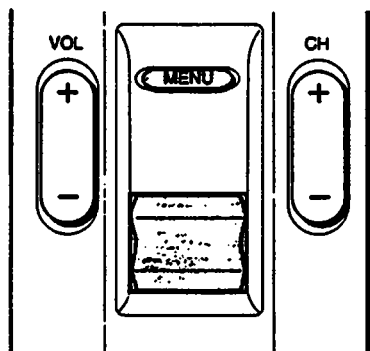
Press MENU on the Remote Commander.

Setting the ON/OFF TIMER

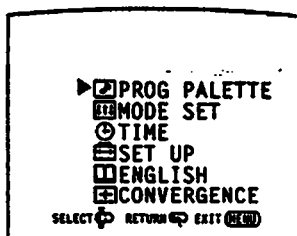
Follow these instructions to make the program of your choice appear on the screen at a specified time.

Example: Set the timer to turn on the projection TV every Monday through Friday at 1:30 AM for 3 hours, on channel 8, as PROGRAM 1. (You can set up to three programs.)

Remote Commander

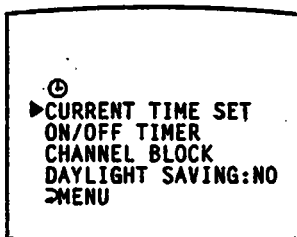


- 1** Press MENU.
The main menu appears.



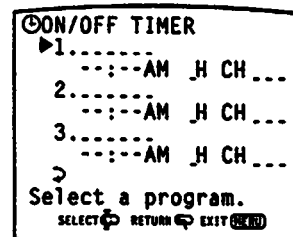
- 2** Press the rocker control up or down until the cursor points to "TIME."

- 3** Click the rocker control.
The time menu appears.



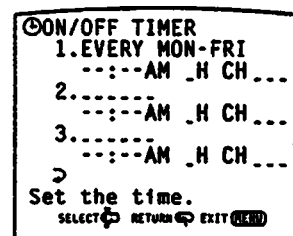
- 4** Press the rocker control up or down until the cursor points to "ON/OFF TIMER."

- 5** Click the rocker control.
The ON/OFF TIMER screen appears, and the cursor points to "1."

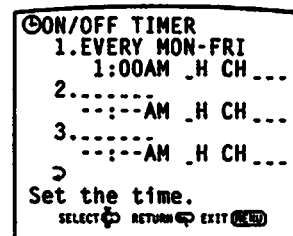


- 6** To set program 1, click the rocker control.
(To set program 2 or 3, press the rocker control up or down until the cursor points to that program; then click the rocker control.)
The day input space turns red.

- 7** Press the rocker control up or down to select "EVERY MON-FRI"; then click the rocker control.
Each time you press the rocker control up, the days of the week change as shown in Fig. 1 (p. 67).



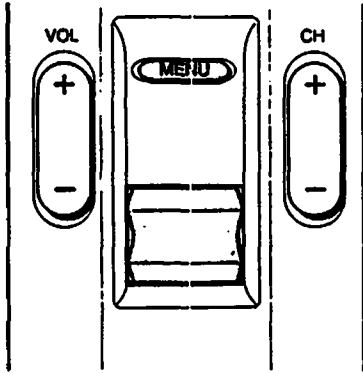
- 8** Press the rocker control up or down to select "1:00AM"; then click the rocker control.
Each time you press the rocker control up or down, the hour changes in sequence.



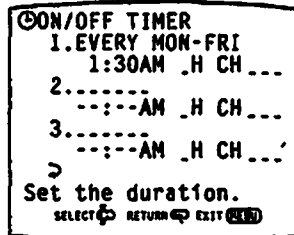
(Continued)

Setting the ON-OFF TIMER (Cont'd from prev. page)

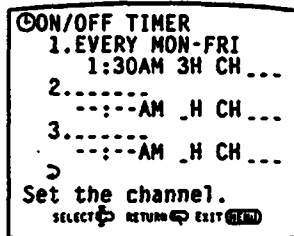
Remote Commander



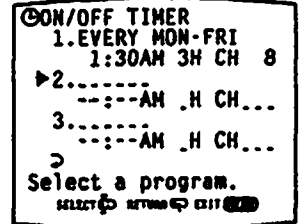
- 9** Press the rocker control up or down to select "30" (minutes);
Then click the rocker control.
Each time you press the rocker control up or down, the minutes change in sequence.



- 10** Press the rocker control up or down to select "3" (hour duration); then click the rocker control.
Each time you press the rocker control up or down, the duration changes from "1" – "6" in sequence.



- 11** Press the rocker control up or down to select "8" (channel); then click the rocker control.
The **TIMER/STAND BY** indicator lights, indicating that the setting is complete.
Each time you press the rocker control up or down, the channel number changes from 1 – 125 in sequence.



The display "TV WILL TURN OFF" appears on the screen one minute before the timer duration ends.

To set program 2 or 3.
Click the rocker control and repeat steps 6 – 11.

To erase an ON/OFF TIMER setting
Display the ON/OFF TIMER screen, select the setting you want to erase, and select the underlined spaces for the day setting.
The **ON/OFF TIMER** setting is erased.

To enter a new ON/OFF TIMER setting
Display the ON/OFF TIMER screen and repeat steps 6 – 11.

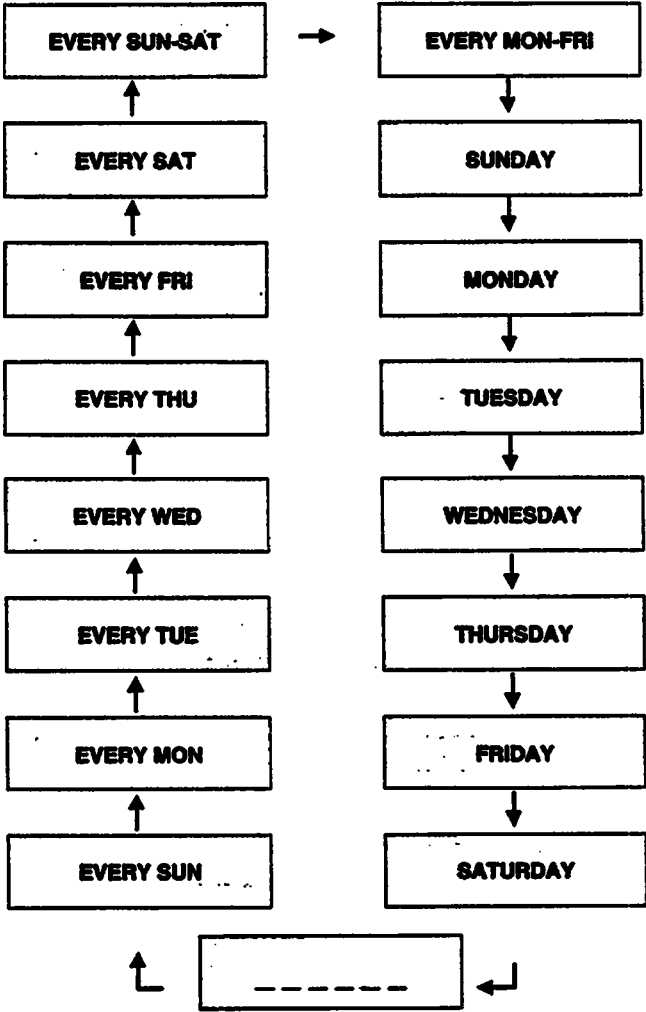
To return to the previous menu
Press the rocker control up or down until the cursor points to "➤ MENU."
Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen.
Press **MENU** on the Remote Commander.

Note
If you unplug the projection TV or a power failure occurs, both the clock and timer settings will be erased. Reset the current time; then set the timer.

Fig. 1
Selecting the day(s) of the week
When you press the rocker control up, the days of the week appear in the following order:

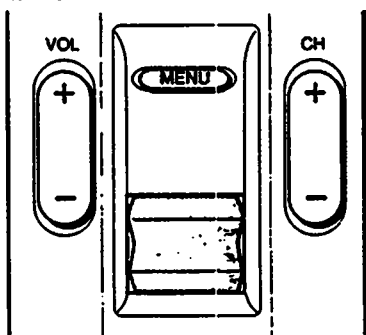


Setting CHANNEL BLOCK

Follow these instructions to prevent a channel from appearing on the screen during the time that you specify. You can use this function to prevent children from watching unsuitable programs.

Example: Set CHANNEL BLOCK every Saturday at 4:30 PM for 1 hour, on Channel 12.

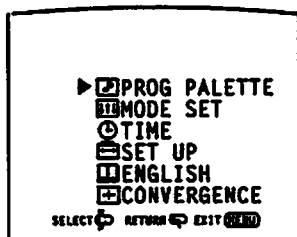
Remote Commander



Note

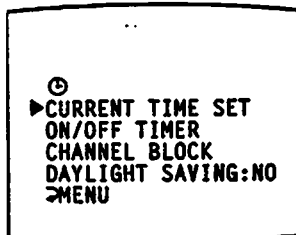
If you have not set the current time, the "CHANNEL BLOCK" display is shaded and cannot be selected.

- 1 Press MENU.
The main menu appears.



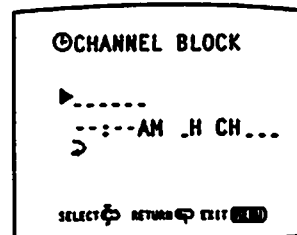
- 2 Press the rocker control up or down until the cursor points to "TIME."

- 3 Click the rocker control.
The time menu appears.

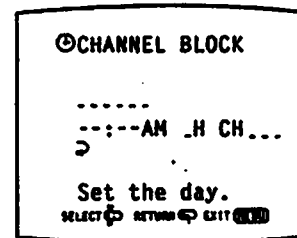


- 4 Press the rocker control up or down until the cursor points to "CHANNEL BLOCK."

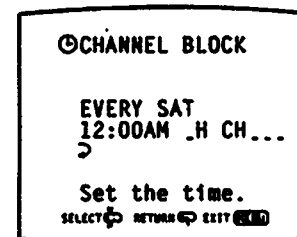
- 5 Click the rocker control.
The CHANNEL BLOCK screen appears, and the cursor points to the day input space.



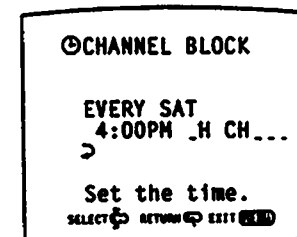
- 6 Click the rocker control.
The day input space turns red.



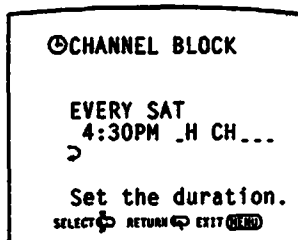
- 7 Press the rocker control up or down to select "EVERY SAT"; then click the rocker control.
Each time you press the rocker control up or down, the days of the week change as shown in Fig. 1 (p. 67).



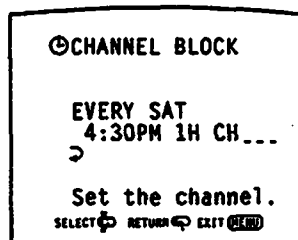
- 8 Press the rocker control up or down to select "4:00PM"; then click the rocker control.
Each time you press the rocker control up or down, the hour changes in sequence.



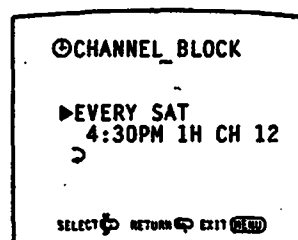
- 9** Press the rocker control up or down to select “:30” (minutes); then click the rocker control.
Each time you press the rocker control up or down, the minutes change in sequence.



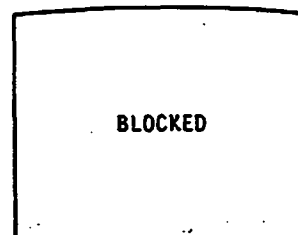
- 10** Press the rocker control up or down to select “1” (hour duration); then click the rocker control.
Each time you press the rocker control up or down, the duration changes from “1” – “6” in sequence.



- 11** Press the rocker control up or down to select “12” (channel); then click the rocker control.
The setting is complete.
Each time you press the rocker control up or down, the channel number changes from “1” – “125” in sequence.



At the specified time, “BLOCKED” appears in red on the screen, and the picture of the specified channel is blocked and the sound is muted.



To erase a CHANNEL BLOCK setting
Display the CHANNEL BLOCK screen and select the underlined spaces for the day setting.
The CHANNEL BLOCK setting is erased.

To enter a new CHANNEL BLOCK setting
Display the CHANNEL BLOCK screen and repeat steps 4 – 10. (You can only set one CHANNEL BLOCK at a time.)

To return to the previous menu
Press the rocker control up or down until the cursor points to “> MENU.”
Then click the rocker control.

To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen.
Press MENU on the Remote Commander.

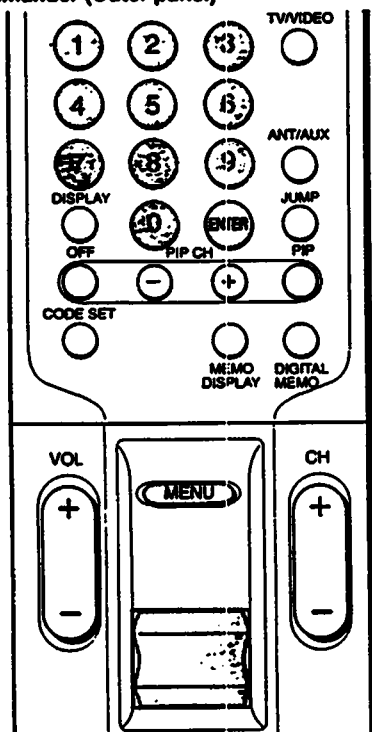
Note

If the ON/OFF TIMER is set for an overlapping time (pp. 67 – 69), the later time setting takes precedence. For example, if CHANNEL BLOCK is set for 2:00 PM and ON/OFF TIMER is set for 3:00 PM, ON/OFF TIMER will take effect at 3:00 PM.

Setting FAVORITE CHANNEL

By setting FAVORITE CHANNEL, you can select the channels you use most frequently (up to seven channels) simply by clicking the rocker control on the Remote Commander.

Remote Commander (Outer panel)



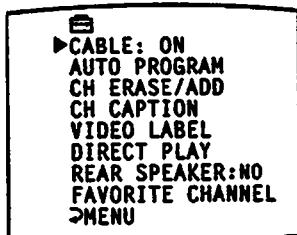
Follow these instructions to set the channels.

- 1** Press MENU.
The main menu appears.



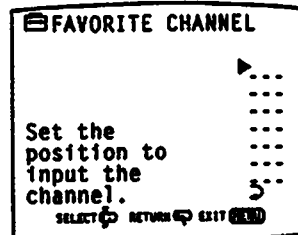
- 2** Press the rocker control up or down until the cursor points to "SET UP."

- 3** Click the rocker control.
The set up menu appears.



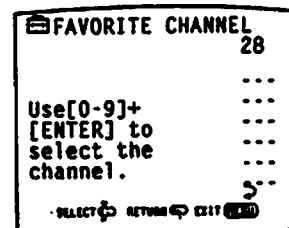
- 4** Press the rocker control up or down until the cursor points to "FAVORITE CHANNEL."

- 5** Click the rocker control.
The FAVORITE CHANNEL screen appears, and the cursor points to the first channel position.



- 6** Press the rocker control up or down to select the channel position; then click the rocker control.

- 7** Press 0 - 9 and ENTER to set the channel number.



- 8** Click the rocker control.
The setting is complete.

To set other channels
Repeat steps 6 - 8.

To erase a favorite channel setting
Press the rocker control up or down until the cursor points to the channel number you want to erase; click the rocker control, then press 0 and ENTER.

To reset a favorite channel setting
Display the FAVORITE CHANNEL screen and repeat steps 6 - 8.

To return to the previous menu
Press the rocker control up or down until the cursor points to "MENU." Then click the rocker control.

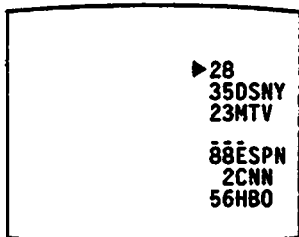
To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen.
Press MENU on the Remote Commander.

Selecting a favorite channel

After setting the channels, follow these instructions to select the channel you want to watch.

-
- 1 Click the rocker control.
The FAVORITE CHANNEL display appears.

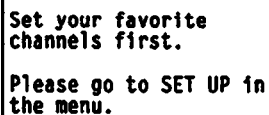


Note

If you have set channel captions (pp. 61 – 62), the captions appear with the channel numbers.

-
- 2 Press the rocker control up or down to select the channel you want to watch; then click the rocker control.
The channel is selected.

If you click the rocker control on the Remote Commander before setting FAVORITE CHANNEL, this screen appears.



Set your favorite
channels first.

Please go to SET UP in
the menu.

Follow steps 1 – 8 to set your favorite channels, and then make the selection.

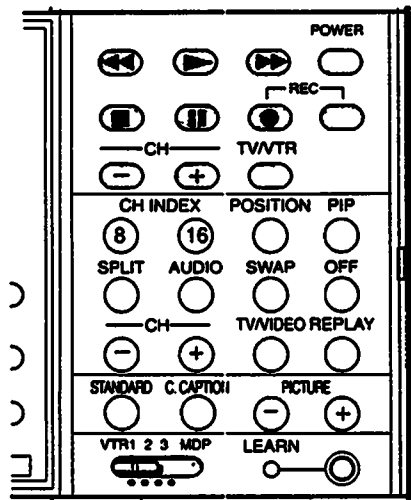
Using the Programmable Remote Commander

You can operate other video equipment (such as VCRs, video disc players and cable boxes) that have an infrared remote detector with this supplied Remote Commander.

Operating Sony video equipment

Follow these instructions to operate Sony video cassette recorders (Beta, 8 mm and VHS) and video disc players (including multi-disc players).

Remote Commander (Inner panel)



1 Set the VTR1-2-3 MDP selector according to the video equipment you want to operate.

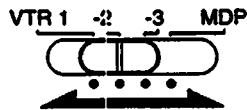


Fig. 2: Video equipment settings

If you want to operate a:	set to:
Beta, ED Beta VCR	VTR 1
8 mm VCR	VTR 2
VHS VCR	VTR 3
Video disc player	MDP

2 Use the video operating buttons to control the connected equipment.

Fig. 3: Operating a VCR (VTR1, 2, 3)	
To turn on or off	Press POWER.
To change channels (when watching TV programs through the VCR's tuner)	Press CH +/-.
To record	Press ● and REC simultaneously.
To play	Press ►.
To stop	Press ■.
To fast forward	Press ►►.
To rewind the tape	Press ◄◄.
To pause	Press . To resume normal playback, press again.
To search the picture forward and backward	Keep pressing ►► or ◄◄ during playback. To resume normal playback, release the button.
To change input mode	Press TV/VTR.

Fig. 4: Operating a Video Disc Player (MDP)	
To turn on or off	Press POWER.
To play	Press ►.
To stop	Press ■.
To pause	Press ■■. <i>To resume normal playback, press again.</i> Note This function is effective only for CAV (standard-play disc). With CLV (extended-play disc), the projection TV goes off (standby mode) if you press ■■.
To search the picture forward and backward	Keep pressing ►► or ◄◄ during playback. <i>To resume normal playback, release the button.</i>

Notes

- If the video equipment does not have a certain function, the corresponding button on this Remote Commander will not operate.
- If you set another manufacturer's code to a VTR1-2-3 MDP selector position (pp. 76 – 77), you must also set the Sony code to operate Sony equipment.

Caution

When you replace the batteries, do it within approximately 30 minutes. Otherwise the settings you made under the Pre-Programmed function (pp. 76 – 78) and Learning function (p. 79) may be erased.



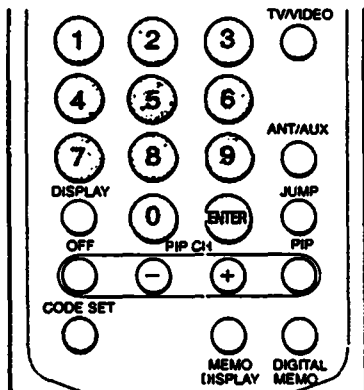
Using the Programmable Remote Commander

Operating non-Sony or Sony video equipment

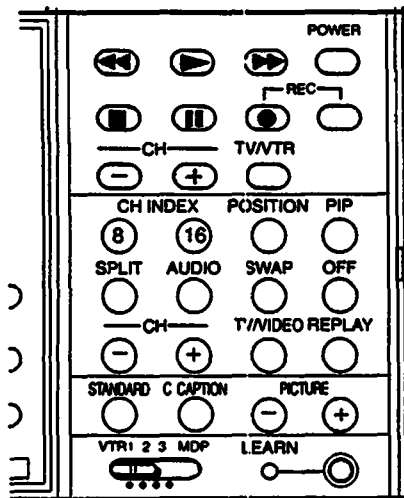
Follow these instructions to set the manufacturer's code, which will enable you to operate non-Sony and Sony video equipment with the pre-programmed Remote Commander.

Example: Operate an RCA video cassette recorder connected to the VIDEO 2 IN jacks.

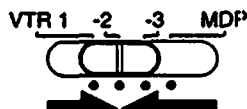
Remote Commander
(Outer panel)



(Inner panel)



1 Set the VTR1-2-3 MDP selector to VTR2.

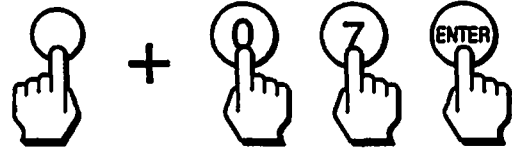


Note

To use another manufacturer's equipment besides a Sony VCR, set the selector to a position not being used for your Sony video equipment.

2 While pressing CODE SET, press 0, 7 and ENTER to set RCA's code number. (For manufacturer code numbers, see Figs. 5, 6 and 7 on p. 77.)

CODE SET



A long beep sounds, indicating that the code has been set.

Note

If you press a wrong code, or if the code has not been set, four short beeps sound. Repeat step 3 to set the code.

3 Use the video operating buttons to operate the connected equipment. (see Fig. 3 on p. 74 and Fig. 4 on p. 75.)

Fig. 5: VCR manufacturer code numbers

MANUFACTURER	CODE
SONY	01, 02, 03
CANON	05
EMERSON	22, 30, 33
FISHER	10, 11, 12, 15
FUNAI	29
GENERAL ELECTRIC	05, 08
GOLDSTAR	25
HITACHI	07, 08, 36
JVC	16, 35
MAGNAVOX	05, 06, 09
MITSUBISHI	18, 19, 26, 27
MULTITECH	29
NEC	16, 23, 31
PANASONIC	05, 06
PHILCO	05, 06
PHILIPS	05, 06, 09
QUASAR	05, 06
RCA	07, 08
SAMSUNG	24, 32
SANYO	11, 15
SCOTT	21
SHARP	13, 14
SHINTOM	34
SYLVANIA	05, 06, 09
SYMPHONIC	29
TEKNIKA	28, 29
TOSHIBA	20, 21
TOTE VISION	25
ZENITH	17

Fig. 6: MDP manufacturer code numbers

MANUFACTURER	CODE
SONY	04
KENWOOD	58
MAGNAVOX	52
MARANZ	54
MITSUBISHI	51
PANASONIC	55
PHILIPS	52
PIONEER	51
RCA	51
SANYO	57
SHARP	56
YAMAHA	53

Fig. 7: Sony Equipment and Code Numbers

SONY EQUIPMENT	CODE
Beta, ED Beta VCR	01
8 mm VCR	02
VHS VCR	03
Video disc player	04

Note

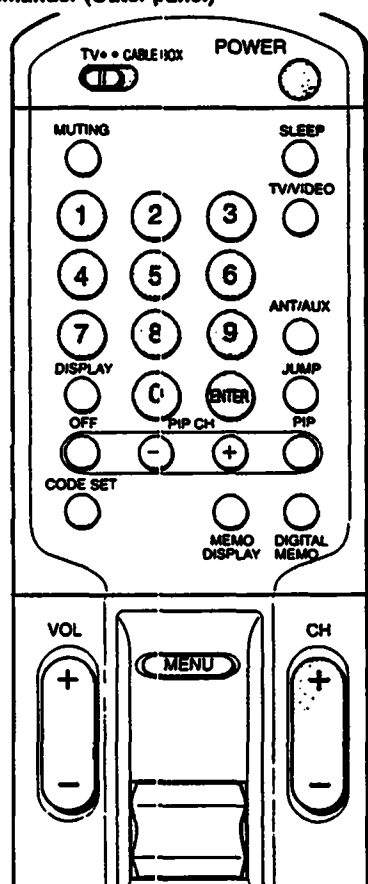
In some rare cases, you may not be able to operate your non-Sony video equipment with the supplied Remote Commander. This is because your equipment may use a code that is not provided with this Remote Commander. In this case, please use the equipment's own remote control unit.

Operating a cable converter box

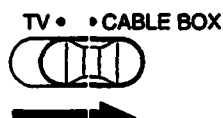
Follow these instructions to set the manufacturer's code, which will enable you to operate a connected cable converter box with the pre-programmed Remote Commander.

Example: Operate a connected Zenith cable converter box.

Remote Commander (Outer panel)



1 Set the TV/CABLE BOX selector to CABLE BOX.

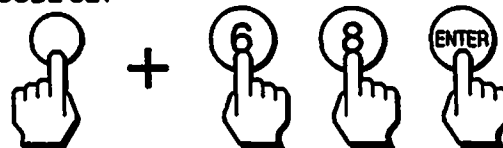


Notes

- If more than one code number is listed, try entering them one by one, until you come to the correct code for your equipment.
- If you enter a new code number, the code number you previously entered at that setting is erased.
- In some rare cases, your equipment may use a code that is not provided with this Remote Commander and you may not be able to operate your cable converter box with the supplied Remote Commander. In this case, use the equipment's own remote control unit.

2 While pressing CODE SET, press 6 and 8 (Zenith's code number — see Fig. 8) and ENTER.

CODE SET

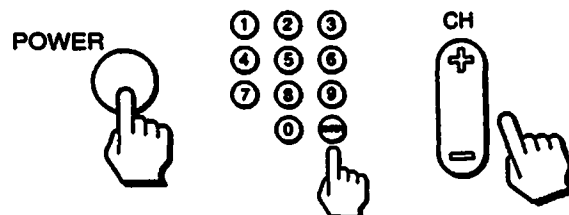


A long beep sounds, indicating that the code has been set.

Note

If you press a wrong code, or if the code has not been set, four short beeps sound. Repeat step 2 to set the code.

3 Use the projection TV control buttons (POWER, 0-9, ENTER and CH +/-) to operate the cable converter box.



To return to the normal screen

Set the TV/CABLE BOX selector to TV; then use the projection TV control buttons to control the projection TV.

For more details on operating the cable box

Refer to the operating instructions that come with the cable box.

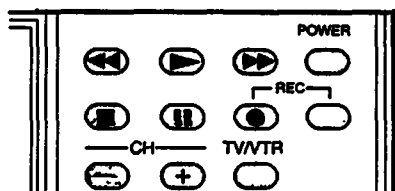
Fig. 8: Cable box manufacturer code numbers

MANUFACTURER	CODE
JERROLD	60, 61, 62, 63, 64, 65
PIONEER	69, 70
SCIENTIFIC ATLANTA	66, 67
TOCOM	71, 72
ZENITH	68

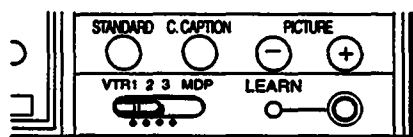
Operating non-Sony or Sony audio and video equipment (Learning function)

Follow these instructions to "teach" any of the programmable buttons to operate the function of another Remote Commander. Use Learning in order to operate non-Sony and Sony audio equipment, and a remote controlled cable converter box or video equipment whose manufacturer code is not listed (Fig. 5, Fig. 6 – p. 77; Fig. 8 – p. 78).

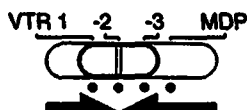
Remote Commander (Inner panel) Programmable buttons



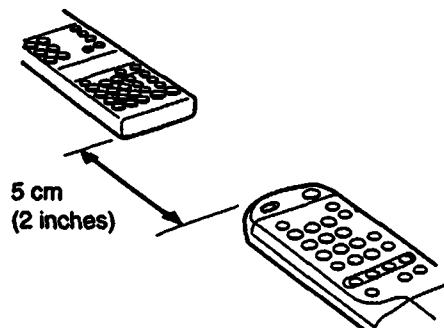
LEARN button and indicator lamp



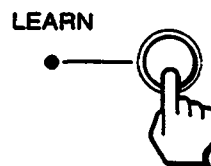
- 1** Set the VTR1-2-3 MDP selector to VTR3 or MDP. (Learning will not work in VTR1 or VTR2 settings.)



- 2** Place the supplied Remote Commander head to head with equipment's remote commander, approximately 5 cm (2 inches) apart.



- 3** Press LEARN.
The LEARN indicator lights up (red).



- 4** Momentarily press the button of the supplied Remote Commander that you want to learn a function.
The LEARN indicator goes off and lights up again, and a short beep sounds, indicating that the Remote Commander is ready for learning.

The Remote Commander beeps repeatedly if an error has occurred. Repeat this step.

- 5** Press and hold down the button of the other remote commander, whose function you want to "teach," until the LEARN indicator turns red.
A long beep sounds and the LEARN indicator goes off and lights up again, indicating that learning is complete. If not, repeat steps 4 and 5.

- 6** Repeat steps 4 and 5 to teach functions to other buttons.

- 7** Press LEARN.
The LEARN indicator lamp lights up (red), then goes off, indicating that learning is complete.

For accurate learning

Do not move the remote commanders during the learning process.

Notes

- If the memory is full, three short beeps sound and the LEARN indicator flashes off and on. Use learning to re-program a button whose learned function you do not use often; the previously learned function is erased.
- If the other remote commander's signal cannot be learned, a short beep sounds and the LEARN indicator flashes once.
- If you press a button that cannot be used for learning, four short beeps sound and the LEARN indicator flashes four times.

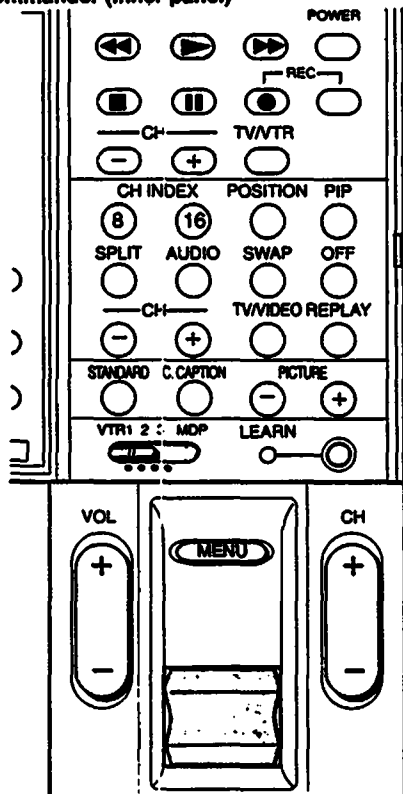
Selecting a VCR mode directly — DIRECT PLAY

Follow these instructions to switch from TV to VCR mode by simply pressing the ► (playback) button on the supplied Remote Commander.

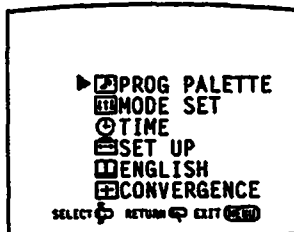
Example: Connect your VCR to the VIDEO 1 IN jacks, and set the VTR1-2-3 MDP selector to VTR2. When you press ►, the input mode changes to the VCR connected to the VIDEO 1 IN jacks.

After completing the steps below, the VTR selector position is retained in the projection TV's memory.

Remote Commander (Inner panel)

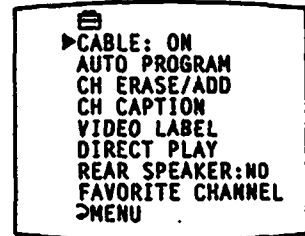


- 1** Press MENU.
The main menu appears.



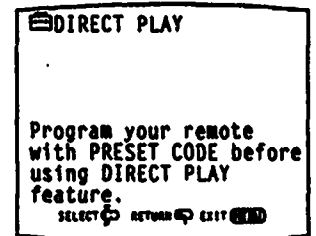
- 2** Press the rocker control up or down until the cursor points to "SET UP."

- 3** Click the rocker control.
The set up menu appears.



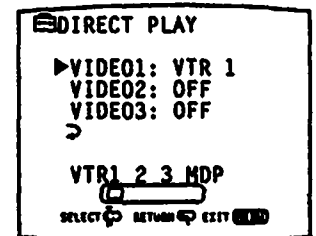
- 4** Press the rocker control up or down until the cursor points to "DIRECT PLAY."

- 5** Click the rocker control.
A message screen appears.



Note
This screen reminds you to set the manufacturer's code, if you have not already done so (pp. 76 – 78).

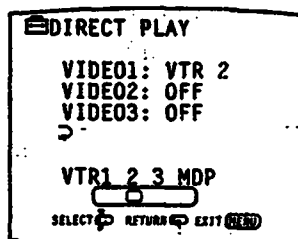
- 6** Click the rocker control again.
The DIRECT PLAY screen appears.



- 7** Press the rocker control up or down until the cursor points to the video input mode. (When the video equipment is connected to VIDEO 1 IN, select "VIDEO1.")

8 Click the rocker control.
The mode display turns red.

9 Press the rocker control up or down to select the VTR selector mode you have set on the Remote Commander. (When the VTR1-2-3 MDP selector is set to VTR2, select "VTR 2.")
Each time you press the rocker control up or down, "VTR 1," "VTR 2," "VTR 3," "MDP" and "OFF" appear in sequence.



10 Click the rocker control.
The direct play setting is complete.

To set direct play for other connected video equipment
Repeat steps 7 – 10.

To return to the previous menu
Press the rocker control up or down until the cursor points to "➤ MENU."
Then click the rocker control.



To return to the main menu
Repeat the above, until you reach the main menu.

To return to the normal screen.
Press MENU on the Remote Commander.

Appendix

Troubleshooting

Disturbances in picture and sound can often be eliminated by checking the symptoms and following the suggestions listed here. If the problem still cannot be solved, contact your nearest service facility.

Symptom	Possible causes and remedies
No picture (screen not lit), no sound	<ul style="list-style-type: none"> • Make sure POWER is switched on. • Check the power cord connection. • Check that the TV/VIDEO and VTR1-2-3 MDP controls are set correctly. • Make sure that the TV/CABLE BOX selector is set to TV.
Poor or no picture (screen not lit), good sound	<ul style="list-style-type: none"> • Adjust the picture using the VIDEO screen (pp. 50 – 53). • Check the antenna/cable connections. • Adjust the color registration (pp. 26 – 27).
Good picture, no sound	<ul style="list-style-type: none"> • Press VOLUME + on the projection TV or VOL + on the Remote Commander. • Press MUTING on the Remote Commander. • Check the MTS setting (p. 58). • Check that the TV/VIDEO and VTR1-2-3 MDP controls are set correctly. • Make sure SPEAKER is set correctly (p. 59).
No color for color programs	<ul style="list-style-type: none"> • Check the HUE and COLOR settings (pp. 50 – 51).
Snow and noise only	<ul style="list-style-type: none"> • Check that it is an active or correct channel. • Check the cable setting. • Check the ANT/AUX button setting. • Check antenna/cable connections.
 Dotted lines or stripes	This is often caused by local interference (for example, cars, neon signs and hairdryers). Adjust the telescopic aerial for minimum interference.
 Double images or ghosts	Reflections from nearby mountains or buildings often cause this problem. Connecting a highly directional outdoor antenna or a CATV cable may improve the picture.
Remote control does not operate	<ul style="list-style-type: none"> • Check the battery in the Remote Commander.
No picture and/or sound for the connected equipment	<ul style="list-style-type: none"> • Check that the TV/VIDEO button is set correctly. • Check that the connections are properly made. • Check that the power of the connected equipment is turned on. • Check that the connected equipment is set correctly.
Try another channel. It could be station trouble.	

Specifications

Structure	Screen and projector, rear projection type
Projection system	3 picture tubes, 3 lenses, horizontal in-line system
Picture tube	5.5 inch high-brightness monochrome tubes, with optical coupling and cooling system
Projection lenses	High performance, large-diameter hybrid lens F 1.0
Screen material	Acrylic plastic lenticular, Polycarbonate plastic Fresnel
Optimal viewing area	Within approx. 75 degrees from center
Projected picture size (in inches, measured diagonally)	

KP-46XBR25	46
KP-53XBR25	53
KP-61XBR28	61

Screen brightness (cd/m²)

KP-46XBR25	1,600
KP-53XBR25	1,250
KP-61XBR28	900

Television system	American TV standards
Channel coverage	VHF: 2 – 13 UHF: 14 – 69 Cable TV: 1 – 125
Antenna	75 ohm external antenna terminal for VHF/UHF
Input jacks	VIDEO IN 1, 2 and 3 S VIDEO IN (4-pin mini DIN) Y: 1 Vp-p, 75-ohms unbalanced, sync negative C: 0.286 Vp-p (Burst signal) 75-ohms Video (phono jacks): 1 Vp-p, 75-ohms unbalanced, sync negative Audio (phono jacks): 500 mVrms (100% modulation) Impedance: 47 kilohms

Output jacks	MONITOR OUT S VIDEO MONITOR OUT (4-pin mini DIN) Y: 1 Vp-p, 75-ohms unbalanced, sync negative Video (phono jacks): 1 Vp-p, 75-ohms unbalanced, sync negative Audio (phono jacks): 500 mVrms (100% modulation) Impedance: 10 kilohms AUDIO (VAR) OUT (phono jacks) More than 900 mVrms (100% modulation) at the maximum volume setting (variable) Impedance: 5 kilohms AUDIO OUT (phono jacks) 900 mVrms (100% modulation) Impedance: 5 kilohms
--------------	--

Speaker	KP-61XBR28 Woofer 16 cm (6½ inches) diameter Tweeter 5 cm (2 inches) diameter KP-46XBR25/53XBR25 Woofer 12 cm (4¾ inches) diameter Tweeter 2.5 cm (1 inch) diameter
Speaker output	20 W x 2 (FRONT) 10 W x 2 (REAR)
CENTER SPEAKER input	16Ω NORM. 30 W MAX 50 W
Power requirements	120 V AC, 60 Hz
Power consumption	

	max.	avg.	standby mode
KP-46XBR25	350	280	7
KP-53XBR25	350	280	7
KP-61XBR28	350	280	7

	Dimension (w/h/d)	Weight
KP-46XBR25	1,103.9 × 1,289.1 × 511.8 mm (43½ × 50¾ × 20¼ inches)	89 kg (196 lbs 3 oz)
KP-53XBR25	1,237.9 × 1,338.1 × 614.6 mm (48¾ × 52¾ × 24¼ inches)	98 kg (216 lbs 1 oz)
KP-61XBR28	1,521 × 1,532 × 780 mm (59⅞ × 60⅝ × 30⅞ inches)	176 kg (388 lbs 2 oz)

Supplied accessories	Remote Commander RM-Y114A (1) with 2 size AA (R6) batteries
Optional accessories	U/V mixer EAC-66 Connecting cable RK-74A VMC-810S/820S YC-15V/30V VCR Tray SU-PJT1 (except for KP-61XBR28)

Design and specifications are subject to change without notice.

● SOUND RETRIEVAL SYSTEM

The ● Sound Retrieval System is manufactured by Sony Corporation under license from the Hughes Aircraft Company, a subsidiary of GM Hughes Electronics. It is covered by U.S. Patent No. 4,748,669. Other U.S. and foreign patents pending.

●, SOUND RETRIEVAL SYSTEM and SRS® are trademarks of the Hughes Aircraft Company, a subsidiary of GM Hughes Electronics.

Index

-
- A** Adjustment
 picture quality (bright, color, hue, sharp) 50 – 51
 sound quality (balance, bass, treble) 57
 ANT/AUX button 30, 36
 AUDIO OUT jacks 19
 AUDIO (VAR) OUT jacks 19
 AUTO PROGRAM 30 – 31
 AUX terminal 14
-
- C** Cable TV channel chart 29
 Cable converter box 14, 46, 78
 CABLE ON/OFF 28 – 29
 CENTER SPEAKER IN terminals 9, 20
 CH CAPTION 61 – 62
 CH +/- buttons 31, 33, 37, 61, 78
 Channel
 adding 34 – 35
 erasing 32 – 33
 presetting 30 – 31
 CHANNEL BLOCK 70 – 71
 Closed Caption 38 – 39
 CODE SET button 76, 78
 Connecting
 antenna cable 13 – 14
 audio system 19
 other equipment 15 – 21
 CONTROL S jacks 17
 CONVERGENCE 26 – 27
-
- D** DEMO button 41
 DIGITAL MEMO button 42
 DIRECT PLAY 80 – 81
 DISPLAY button 40
-
- E** ENTER button 35, 37, 61, 76, 78
-
- F** FAVORITE CHANNEL 72 – 73
 Front 8
-
- J** JUMP button 41
-
- L** LEARN button 79
-
- M** MEMO DISPLAY button 42
 MONITOR OUT jacks 17 – 18
 MTS mode 58
 MUTING button 40
-
- N** NR ON/OFF 53
-
- O** On-screen menus 22 – 23
-
- P** Picture +/- buttons 51
 Picture and sound mode 43 – 44
 Picture-in-Picture (PIP) 45 – 49
 POWER button 24, 78
 Programmable Remote Commander 74 – 81
-
- R** REAR SPEAKER YES/NO 21, 56, 60
 REAR SPEAKER OUT terminals 21
 Rear 9
-
- S** S-VIDEO ON/OFF 15, 52
 SLEEP button 40
 Sound modes 55 – 56
 STEREO indicator lamp 58
 SPEAKER MAIN/CENTER 19 – 20, 59
 STANDARD button 44, 51
-
- T** Thumb rocker control 10, 24
 Timer activated functions
 channel block 70 – 71
 current time set 65 – 66
 daylight saving 64
 on/off timer 68 – 69
 TIMER/STAND BY indicator lamp 24, 36, 68
 TO CONVERTER terminal 14
 TV/CABLE BOX selector 36, 78
 TV/VIDEO button 15 – 18, 28, 30, 37, 45, 46, 50, 74, 76
 Trinitone 52
-
- V** VCR 15 – 18, 74 – 77, 79 – 81
 VHF/UHF antenna terminal 13 – 16, 46
 VIDEO 1, 2, 3 IN jacks 15 – 18, 46
 VIDEO 3 OUT jacks 18
 VIDEO LABEL 63
 Video operating buttons 74 – 75
 VOL +/- button 19, 37, 40
 VTR1-2-3 MDP selector 74 – 76, 79 – 81
-



Color Rear Video Projector

KP-46XBR25 KP-53XBR25 KP-61XBR28